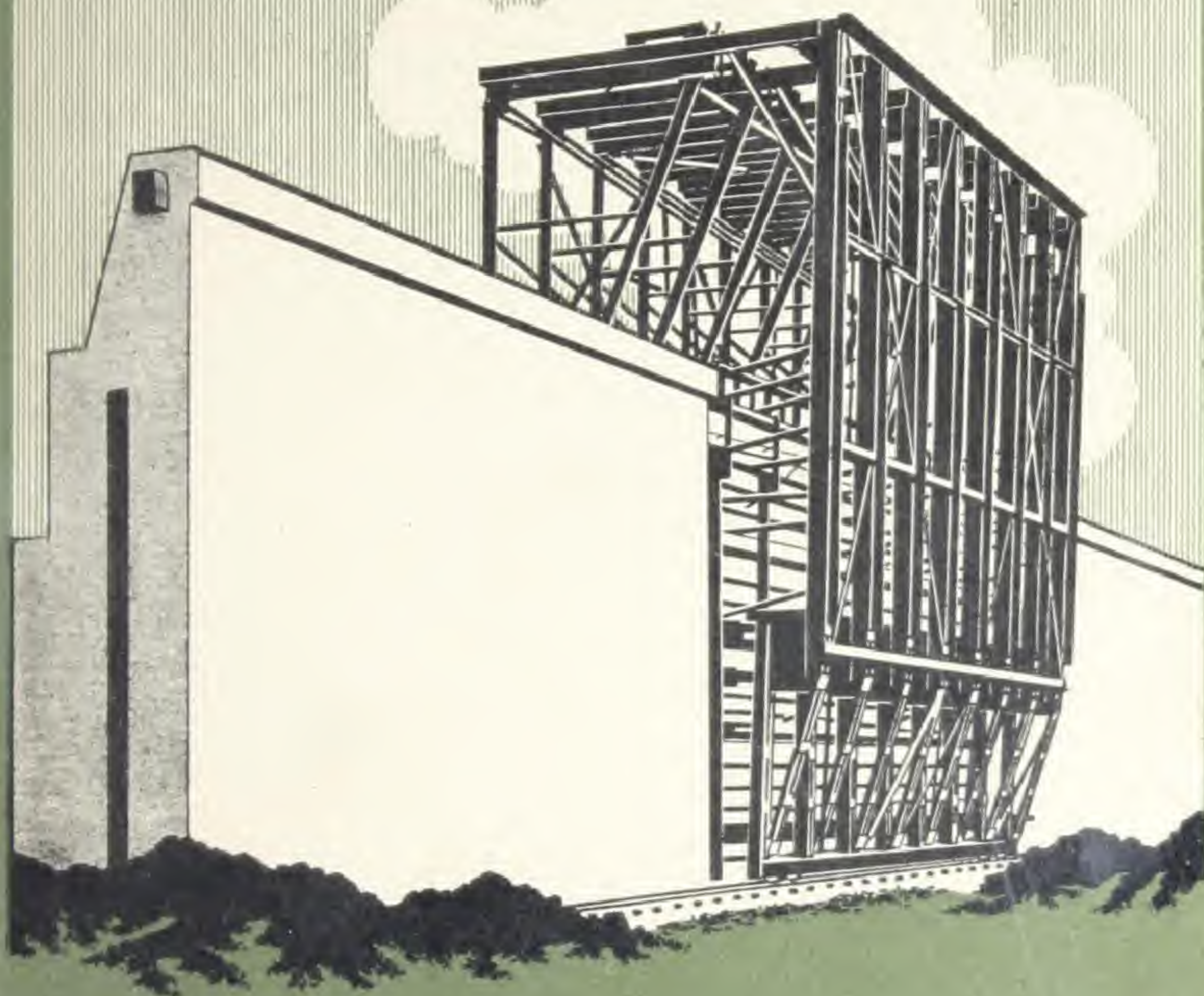
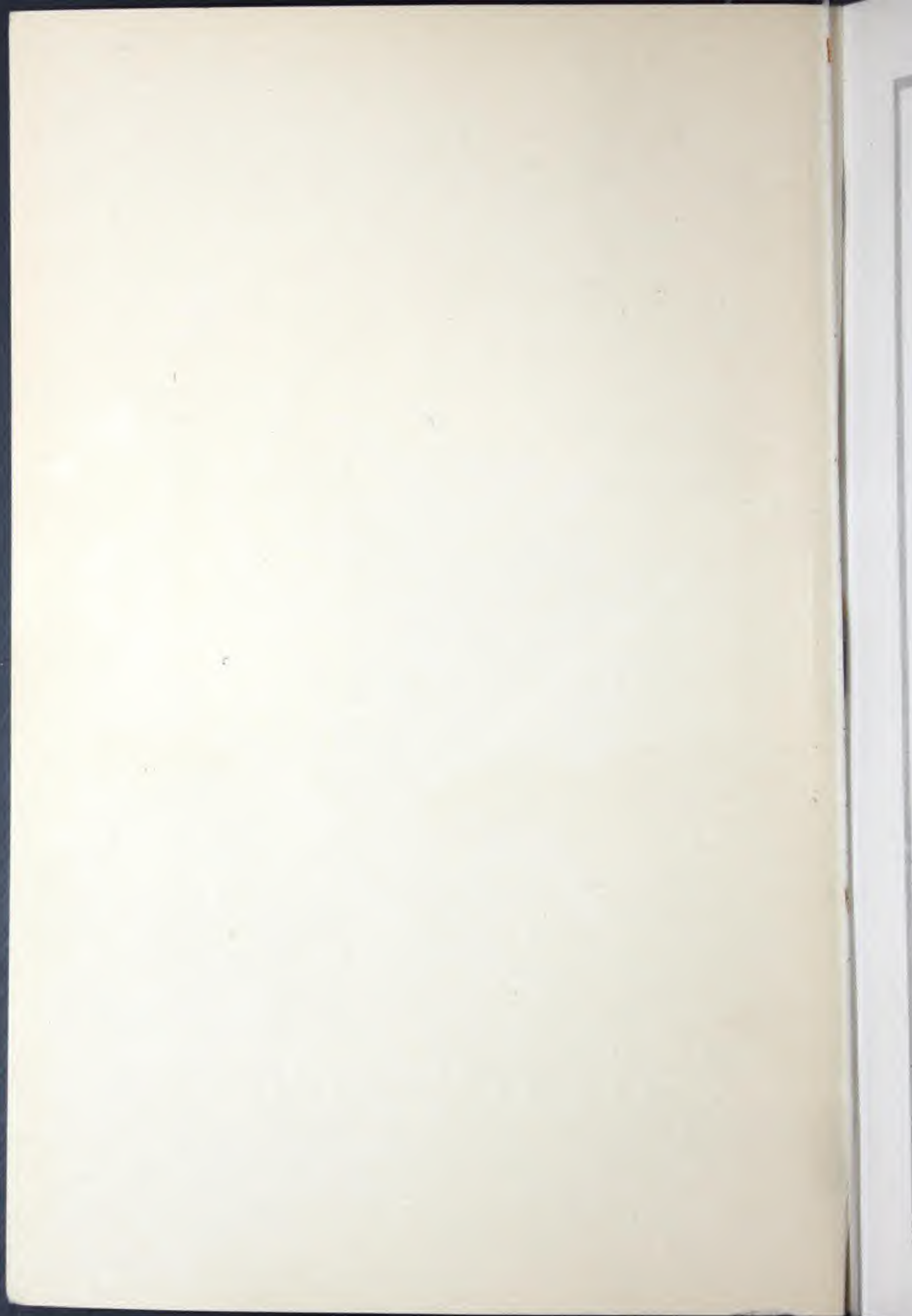


97-13.



Blawforms



The Blaw SYSTEM

NEW YORK
165 Broadway



CHICAGO
Peoples Gas Bldg.

PITTSBURGH SALES OFFICE
Farmers Bank Building

GENERAL OFFICES AND WORKS—HOBOKEN, PA.

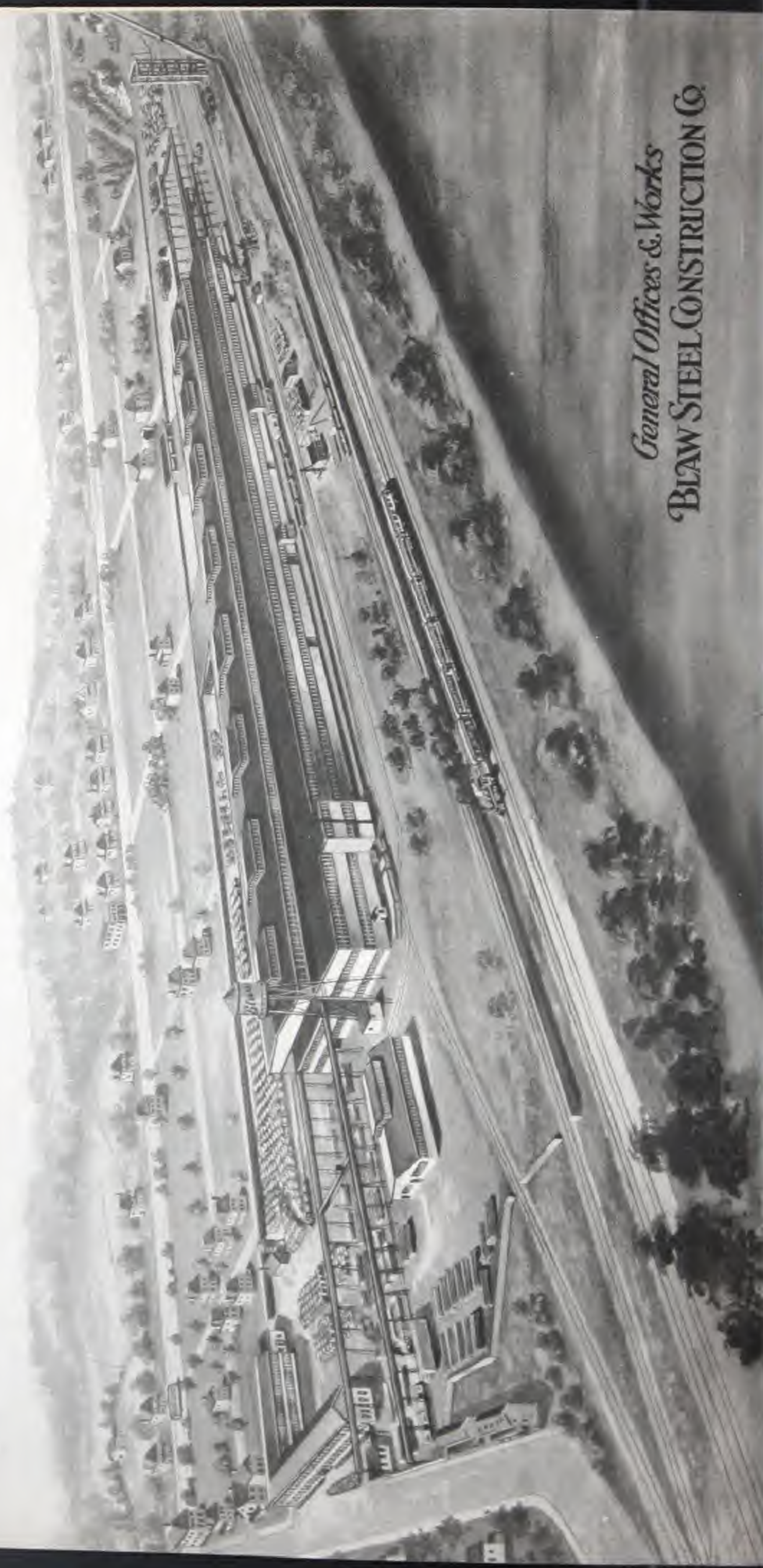
Concrete forms

A Book of Descriptive Text and Photographs
Which Illustrate the Economy and
Adaptability of Blaw Steel Forms
for Concrete Work of All Kinds

(C-1920's)

CATALOG No. 16

General Offices & Works
BLAW STEEL CONSTRUCTION CO.



Blaw

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Blaw Steel Forms for Every Type of Concrete Construction

THE intent of this booklet is to suggest to contractors and engineers the many economies effected by the use of Blaw Steel Forms in every type of concrete construction. It contains illustrations which show a few of the 20,000 contracts on which Blawforms have proved their value.

Being pioneers in Steel Form Construction, and with an experience extending over ten years, we have kept pace with the construction methods used on all of the large engineering projects of the past decade, applying Blawforms in part, or in whole, in their construction.

Among the larger engineering works upon which Blaw Steel Forms have been used, are the Panama Canal, the New York State Barge Canal, the Catskill Aqueduct, the Winnipeg Aqueduct, Subways in New York and Boston, and the Sewer Systems in New York, Chicago, St. Louis, Baltimore, Louisville and other leading cities. We are justly proud of our success on these, as well as on thousands of other projects of lesser magnitude, involving the construction of buildings, bridges, tunnels, roads, dams, and in fact, every kind and variety of concrete structure of commercial importance.

Blaw Engineering Service

There are few kinds of concrete work in which Blaw Engineering Service will not effect a very considerable economy. When you put your case and problem up to us, we apply all the knowledge gained on all our contracts to your particular case. You get the advice, suggestions and plans of able engineers, who are fully capable of studying your needs and designing steel forms to handle your work at the least possible cost. If we can't save you money, we will frankly tell you.

Why Contractors Should Use Blawforms

Blaw Steel Forms can be erected, taken down and moved to a new position by common labor in a fraction of the time required for wood forms. The resulting surface of the concrete is smooth and even and refinishing is practically eliminated. The forms are extremely durable, and, with no renewals or repairs, will outlast many equipments of wood forms.

By consulting our Engineering Department before making up his bids, the contractor can secure complete information of the most economical form for his particular job and thus profit by experience gained on a great number of similar jobs with which he may not be familiar.

Why Engineers Should Specify Blawforms

Blaw Steel Forms will never warp, crack nor allow the best ingredients of the mixture to leak away. They are in the same condition at the end of a job as at the beginning, hence the quality of work never varies throughout the job. The smooth glossy surface left by the steel form offers very little surface friction to the flow of water, and the form itself is not injured by spading the concrete to obtain a good surface.

Blawforms can be heated in freezing weather, hence concreting is carried on continuously. The forms are easily removed after the concrete has set, without marring or jarring the concrete.

Send Us Plans and Specifications

No matter what, when or where you build, it will pay you to learn just what savings Blawforms will make for you. We will gladly submit designs and estimates on steel forms for any concrete work you may have under consideration.

Blawforms FOR Sewers & Conduits



Blaw 122-inch Standard Half Round Sewer Forms on Crown, and Blaw Light Wall Forms on Side Walls, Special Steel Outside Forms for Arch; Columbus, Ohio. J. C. Carland & Co., Contractors

CONCRETE Sewers are constructed in many different ways; in some cases to meet the individual ideas of the engineer, in others, to meet local conditions. Our many styles of Sewer Forms enable you to select the one best fitted for your work regardless of the design of the sewer or the manner in which it is built.

Blaw Half Round Sewer Forms are generally used for Circular Sewers by laying the Invert first and the Crown afterwards. They are in interlocking five foot sections and are used in any length desired. The smaller sizes have rollers or wheels on their collapsing turnbuckles and the entire unit is moved in a single operation. Larger Sewer Forms and Aqueduct Forms are made with special travelers, either unit-handled or divided and telescoped from the rear to the front of the work.

Aqueducts are required to be as smooth on the inside as it is possible to make a water-carrying concrete tube. This is possible only with steel forms. The form is made up of as few plates as possible to eliminate the joints. We have successfully built Aqueduct Forms as large as 17 feet in diameter with a longitudinal joint only at the springing line and at the crown, and with girth joints every five feet.

BLAWFORMS FOR SEWERS AND CONDUITS



Blaw 60-inch Standard Half Round Sewer Forms. 100 Feet Ready for Concrete. Note Perfect Alignment.

Blaw 60-inch Standard Half Round Sewer Forms on Curve; Indianapolis, Indiana. Julius Keller Construction Company, Contractors.



Blaw Standard Half Round Sewer Forms Being Moved in 100-foot Unit.

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BLAWFORMS FOR SEWERS AND CONDUITS

Blaw 42-inch Standard Half Round Sewer Form; Springfield, Mass. Forms Have Rollers on Collapsing Turnbuckles for Running on Plank Track when Moving.



Blaw 51-inch Standard Half Round Sewer Form; Pittsburgh, Pa. James McQuaide, Contractor.

Blaw Standard Half Round Sewer Form; New York City. Joseph Rotti, Contractor.



BLAWFORMS FOR SEWERS AND CONDUITS



Blaw 10-foot
Standard Half
Round Sewer
Form; Indian-
apolis, Indiana.
Reliable Con-
struction Com-
pany, Contract-
ors.

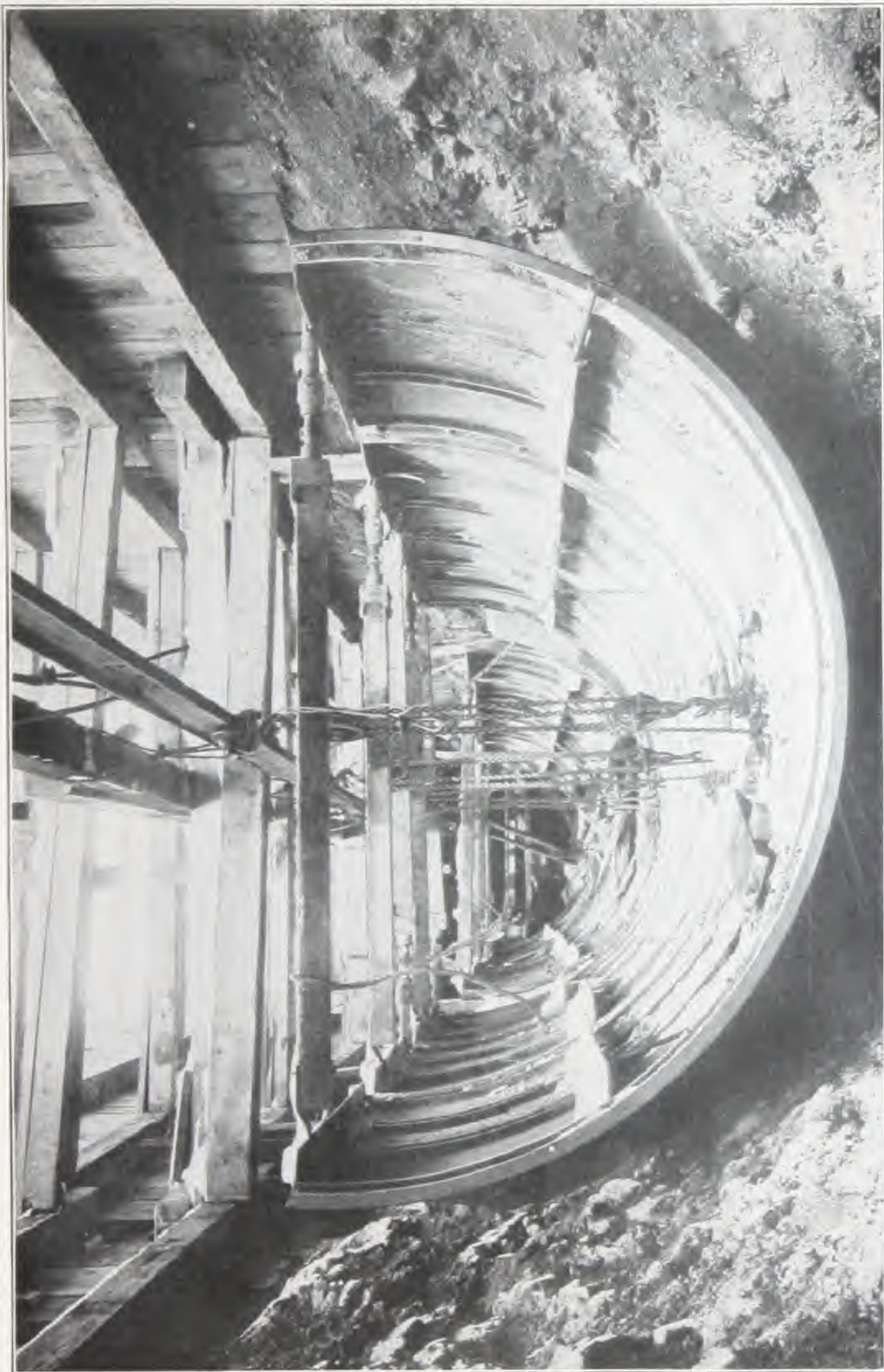


Blaw 7-foot
Standard Half
Round Sewer
Form with Side
Walls Attached;
Pittsburgh, Pa.
John F. Casey
Company, Con-
tractors.



Blaw 9-foot
Standard Half
Round Sewer
Form; Toronto,
Canada. City
Work. R.C. Harris
Commissioner.

BLAWFORMS FOR SEWERS AND CONDUITS



Blaw 10 Ft. Standard Half Round Sewer Form Constructing Invert. The Forms are Moved by Overhead Trolley Hangers; Columbus, Ohio. J. C. Carland & Company, Contractors

BLAWFORMS FOR SEWERS AND CONDUITS

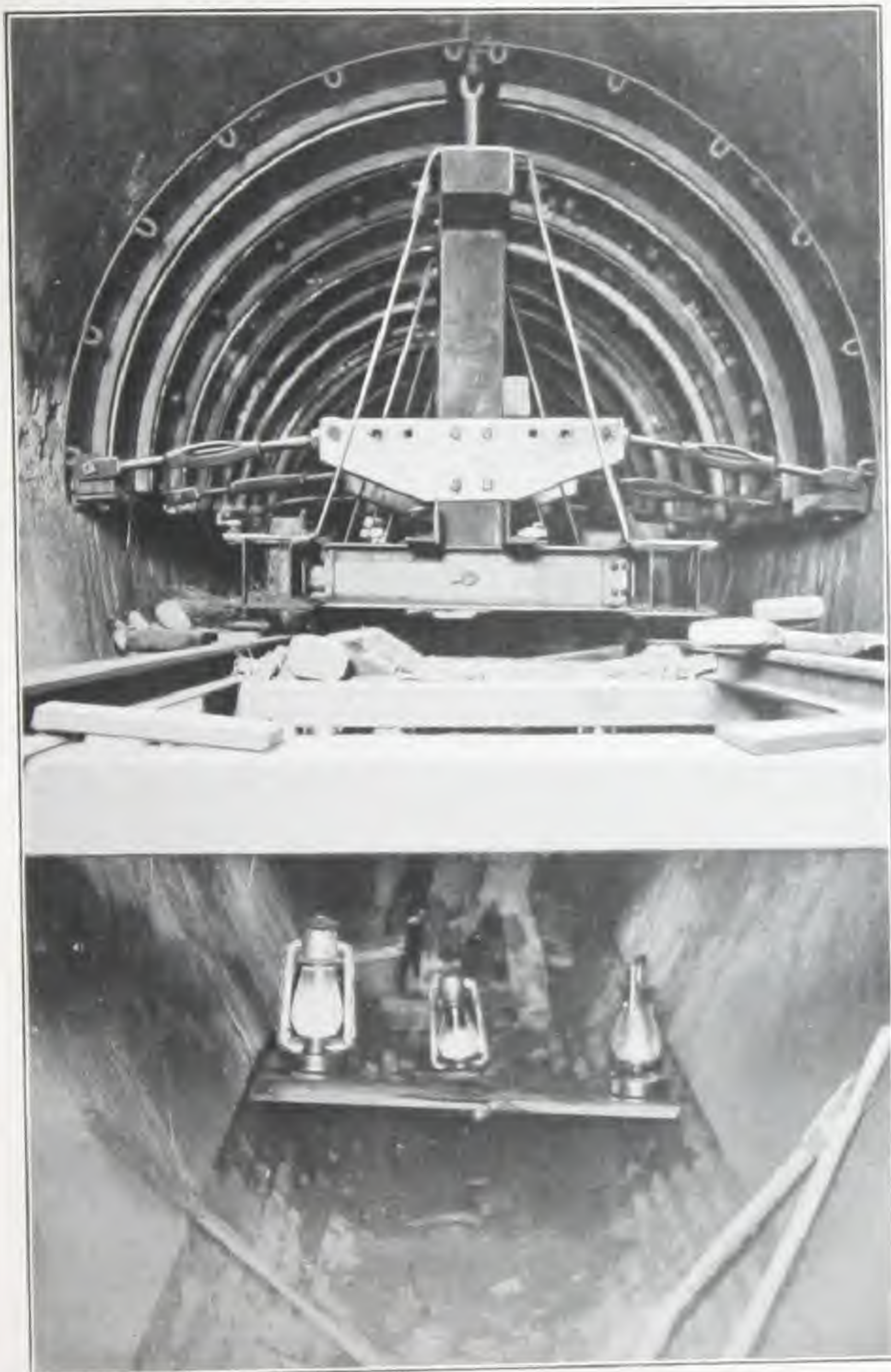


Blaw Standard Half Round Sewer Forms, Used on 42-inch to 72-inch Brick Sewers in Atlanta, Ga. C. W. Lane & Company, Contractors



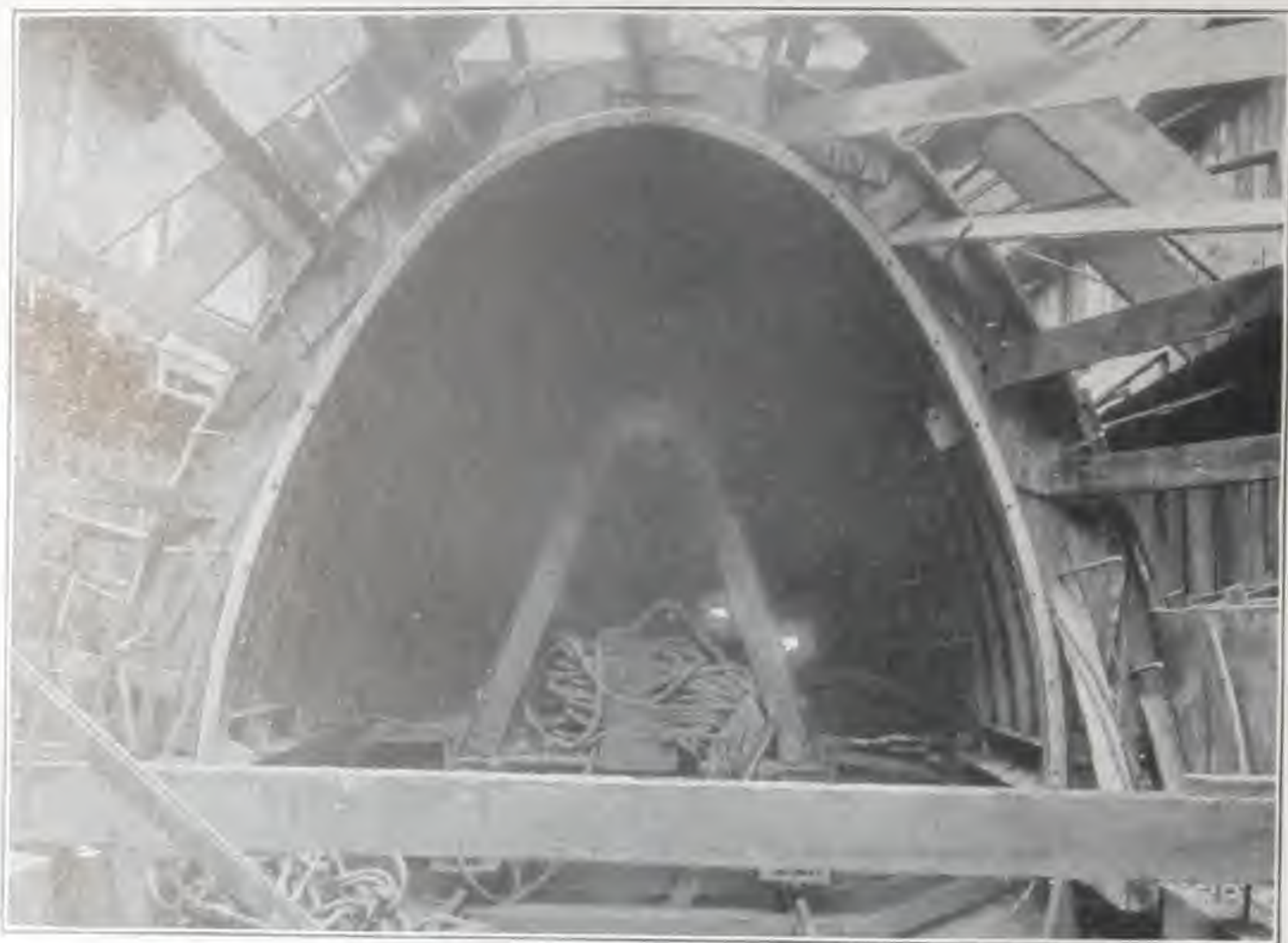
Blaw 8-foot Telescopic Sewer Form, Horseshoe Design, Chicago, Ill. Ready & Callaghan Coal Company, Contractors

BLAWFORMS FOR SEWERS AND CONDUITS

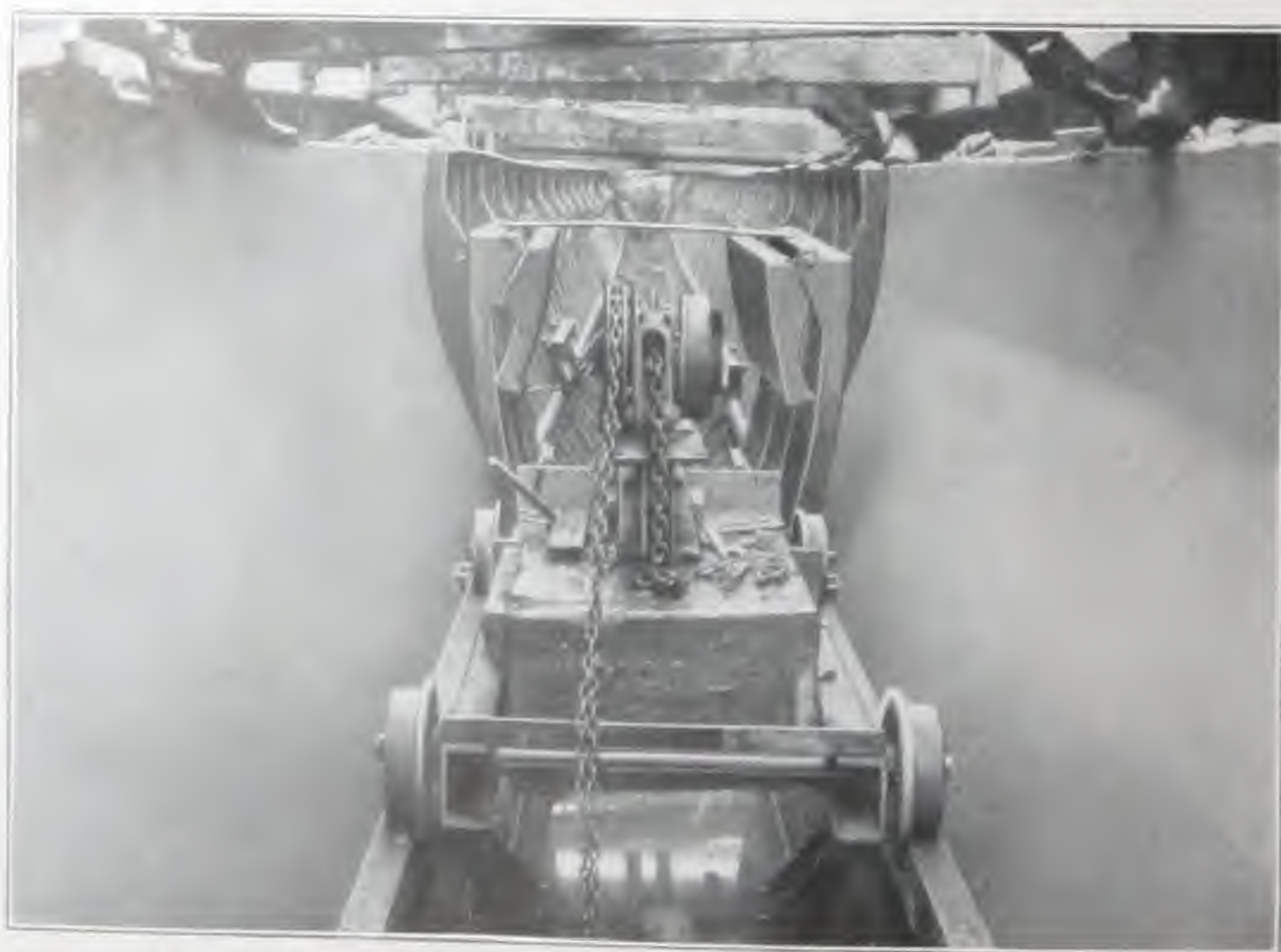


Blaw Standard Half Round Sewer Form and Traveler, on 8-foot by 12-foot Egg-shaped Sewer, Spokane, Wash. James Kennedy, Contractor

BLAWFORMS FOR SEWERS AND CONDUITS



Blaw 10-foot Horseshoe-shaped Sewer Form; Louisville, Ky.
Henry Bickel & Company, Contractors



Blaw 6-foot by 9-foot Elliptical Sewer Form; Chicago, Ill.
Henry J. McNichols Company, Contractors

BLAWFORMS FOR SEWERS AND CONDUITS



Blaw 50-inch by 75-inch Egg-shaped Sewer Form; Ottawa, Ill.
Green & Sons, Contractors

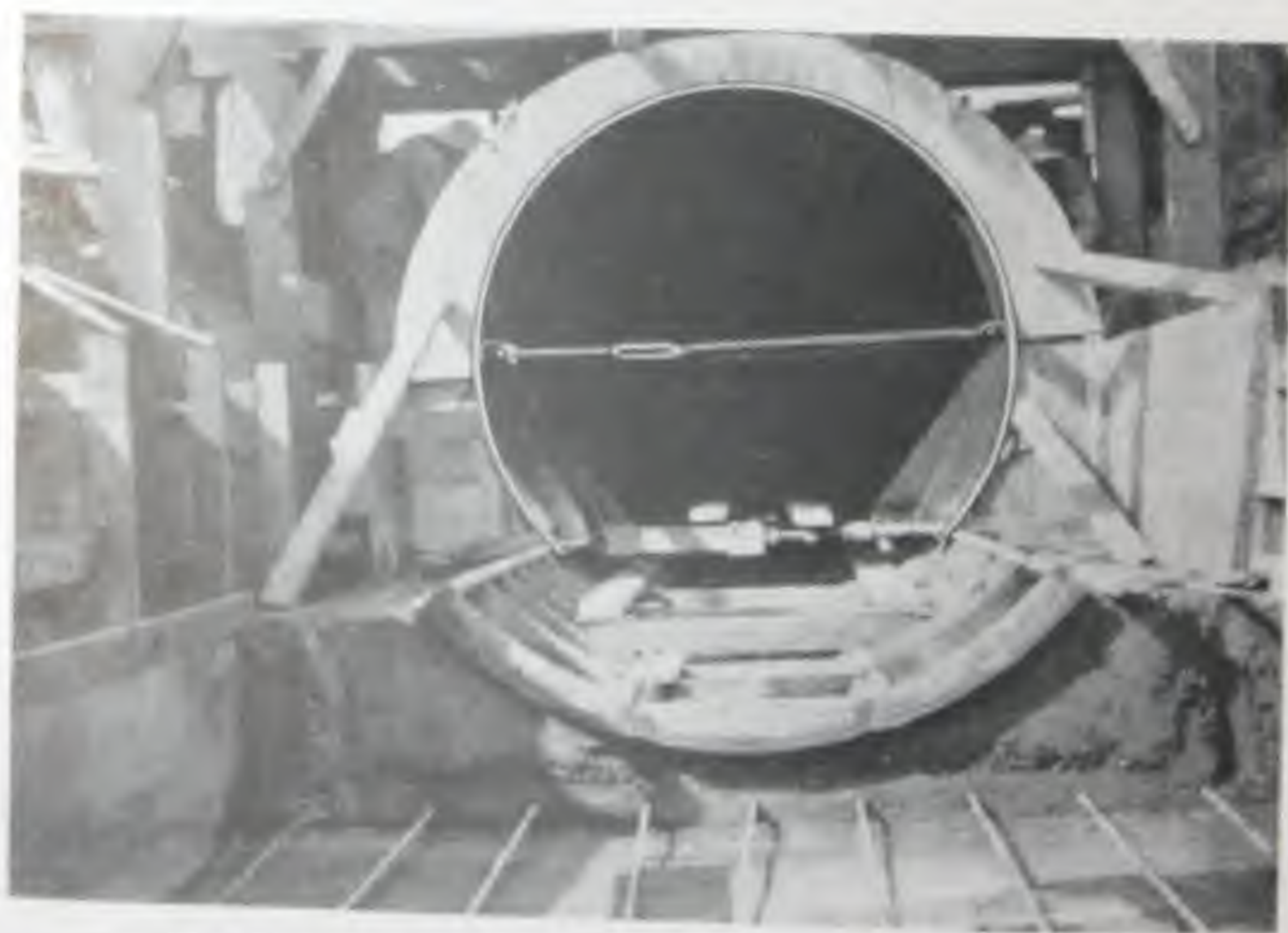


Blaw 48-inch by 72-inch Egg-shaped Sewer Built with Egg-Shaped
Invert Form and Standard Half Round Crown Form
Albrecht & Leader, Contractors

BLAWFORMS FOR SEWERS AND CONDUITS



Blaw 108-inch Elliptical Sewer Form and Traveler; Passaic Valley
Sewer, Newark, N. J. Oscar Daniels Company, Contractors



Blaw 90-inch, $\frac{3}{4}$ -Circle Sewer Form; Seattle, Washington
Sparger Contracting Company, Contractors

BLAWFORMS FOR SEWERS AND CONDUITS

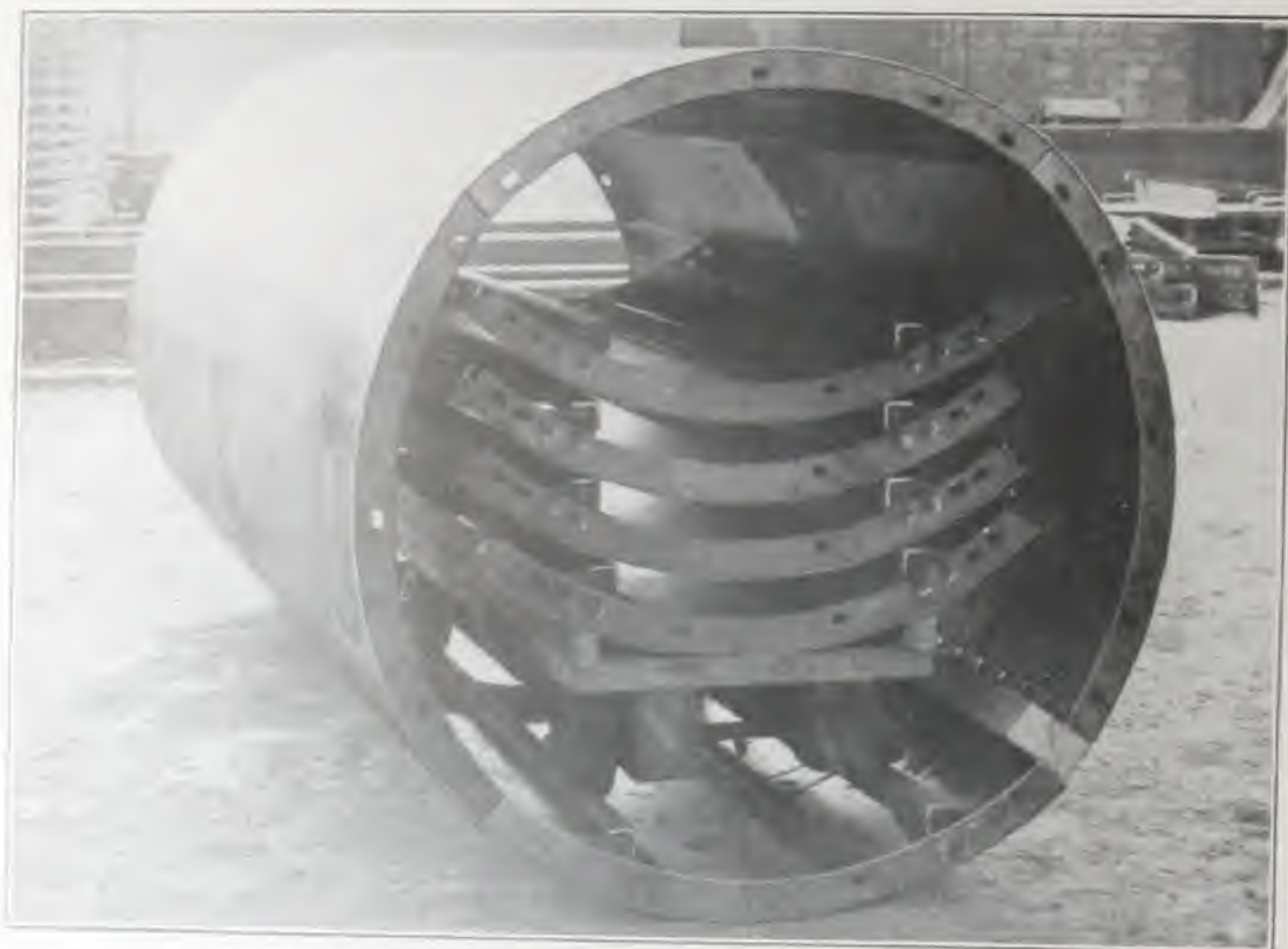


Blaw 60-inch Full Round Telescopic Form; Belle Forche, S. D.
United States Reclamation Service

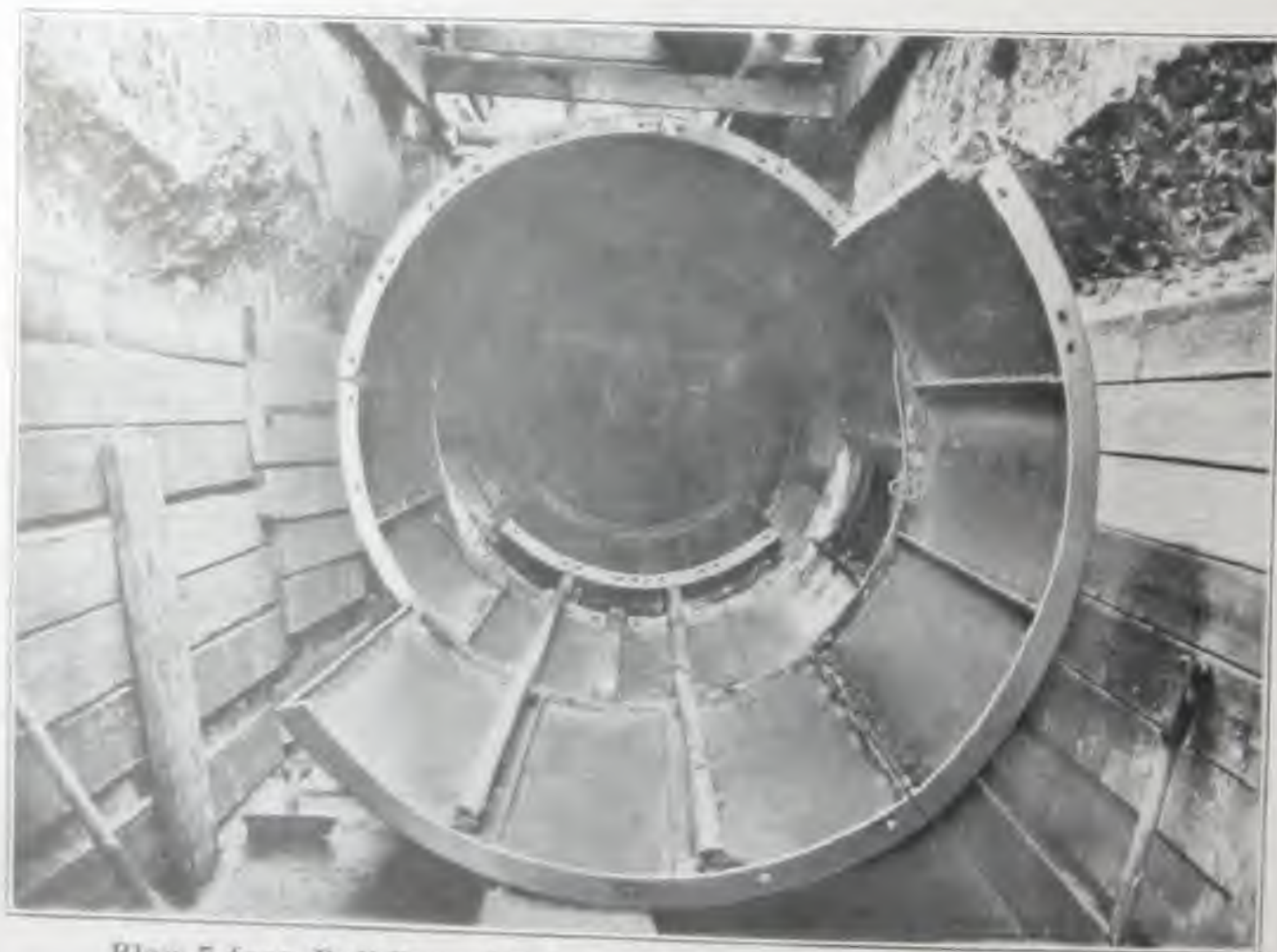


Blaw 38-inch Full Round Sewer Form; Waterbury, Conn.
Long & Little, Contractors

BLAWFORMS FOR SEWERS AND CONDUITS

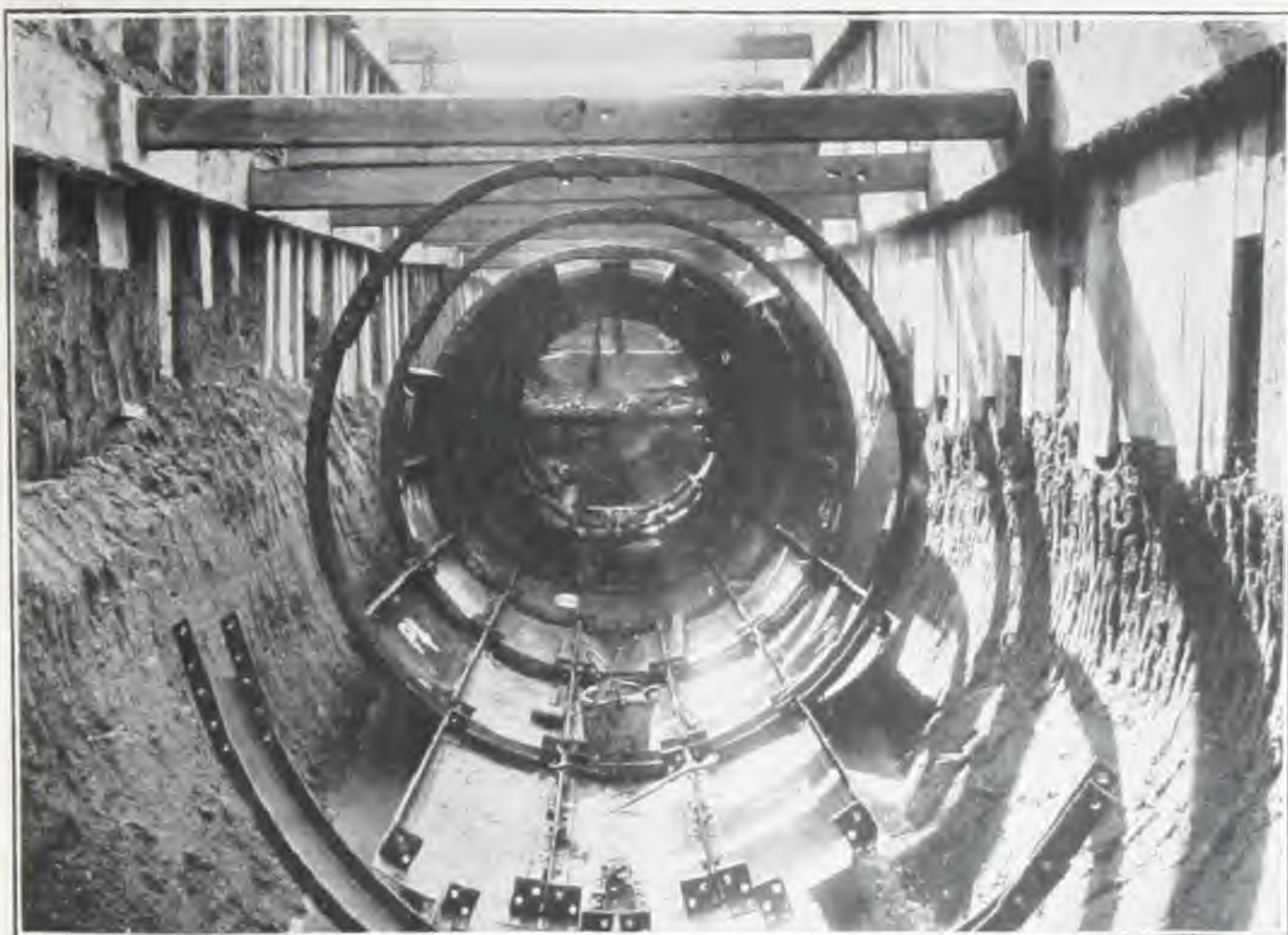


Blaw Standard Full Round Telescopic Sewer Forms, Showing
Knocked Down Sections Loaded on Truck



Blaw 7-foot, Full Round Telescopic Sewer Forms; Houston, Texas
Horton & Horton, Contractors. (Same Form Shown Above)

BLAWFORMS FOR SEWERS AND CONDUITS



Blaw 6-foot, Tunnel Type Form Used in Open Cut Construction
(Same Form Used in Tunnels) Milwaukee, Wisconsin.
The Raulf Company, Contractors



Blaw 84-inch Full Round Telescopic Form, Showing Invert Sections in
Position; Catskill Aqueduct. Harrison & Boice, Contractors

BLAWFORMS FOR SEWERS AND CONDUITS

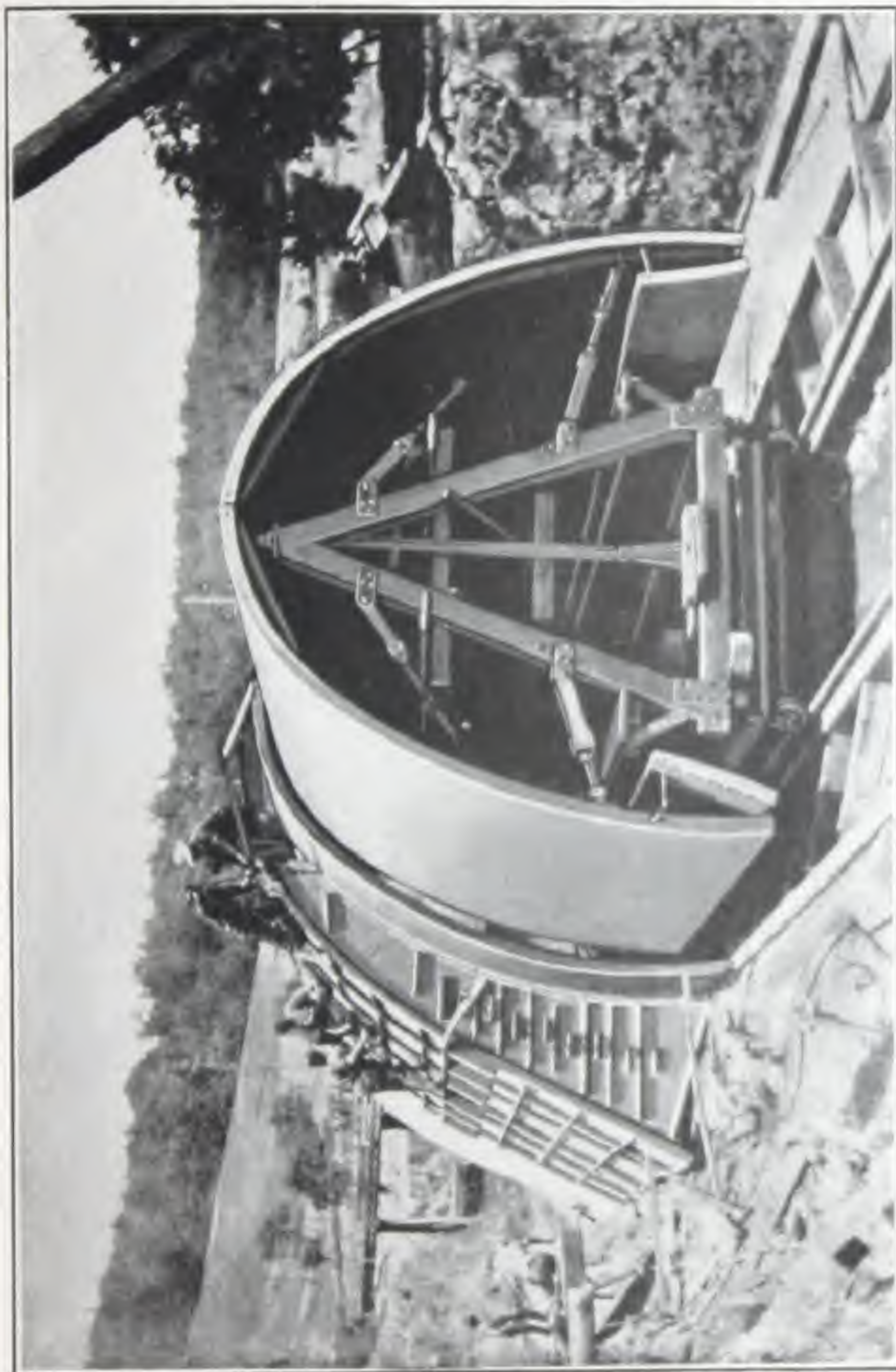


Blaw 17-foot, Full Round Telescopic Forms; Hill View Reservoir
By-Pass, Catskill Aqueduct. Keystone State
Construction Company, Contractors

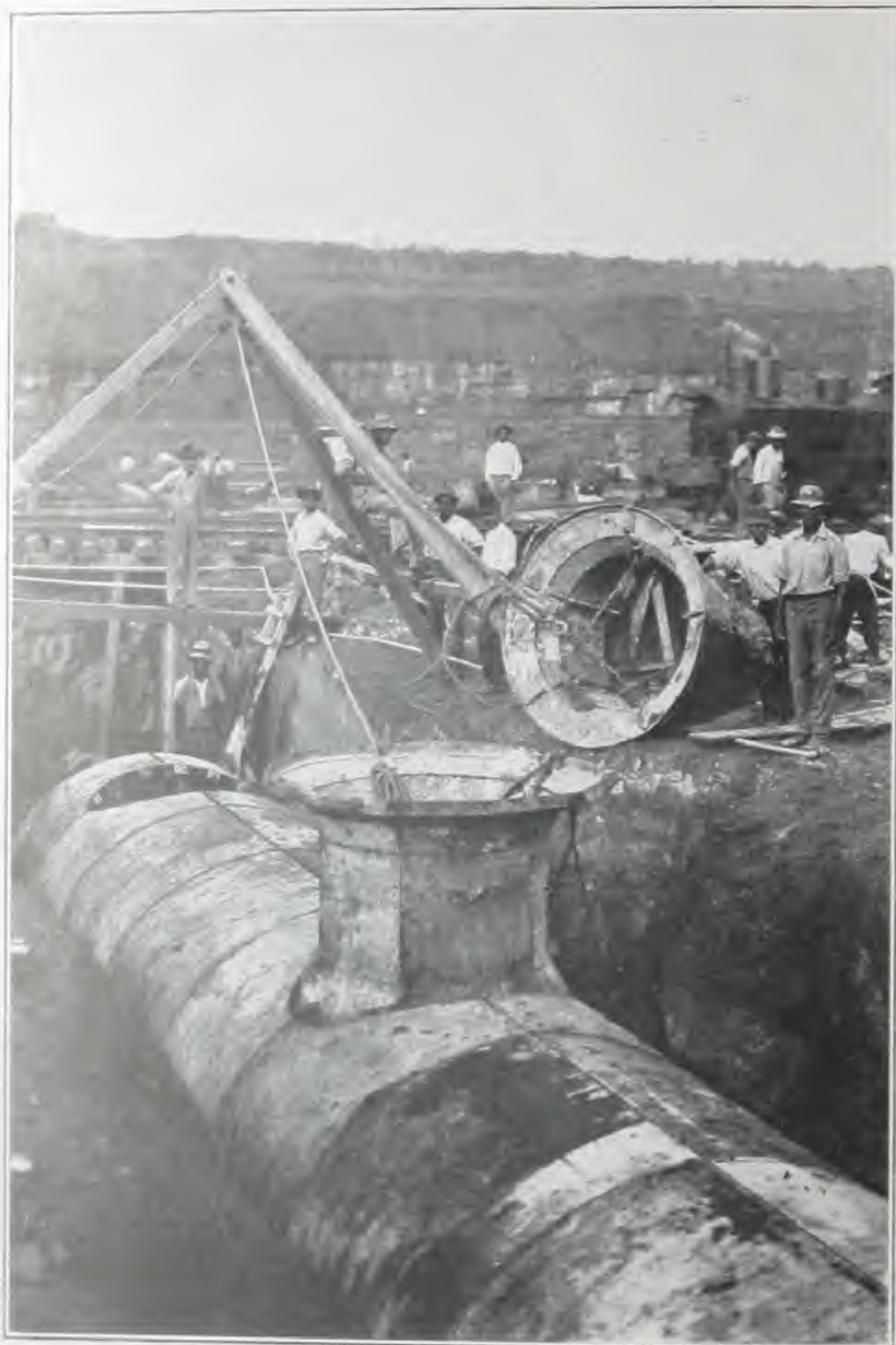


Blaw Inside and Outside Cut-and-Cover Forms; Catskill Aqueduct

BLAWFORMS FOR SEWERS AND CONDUITS

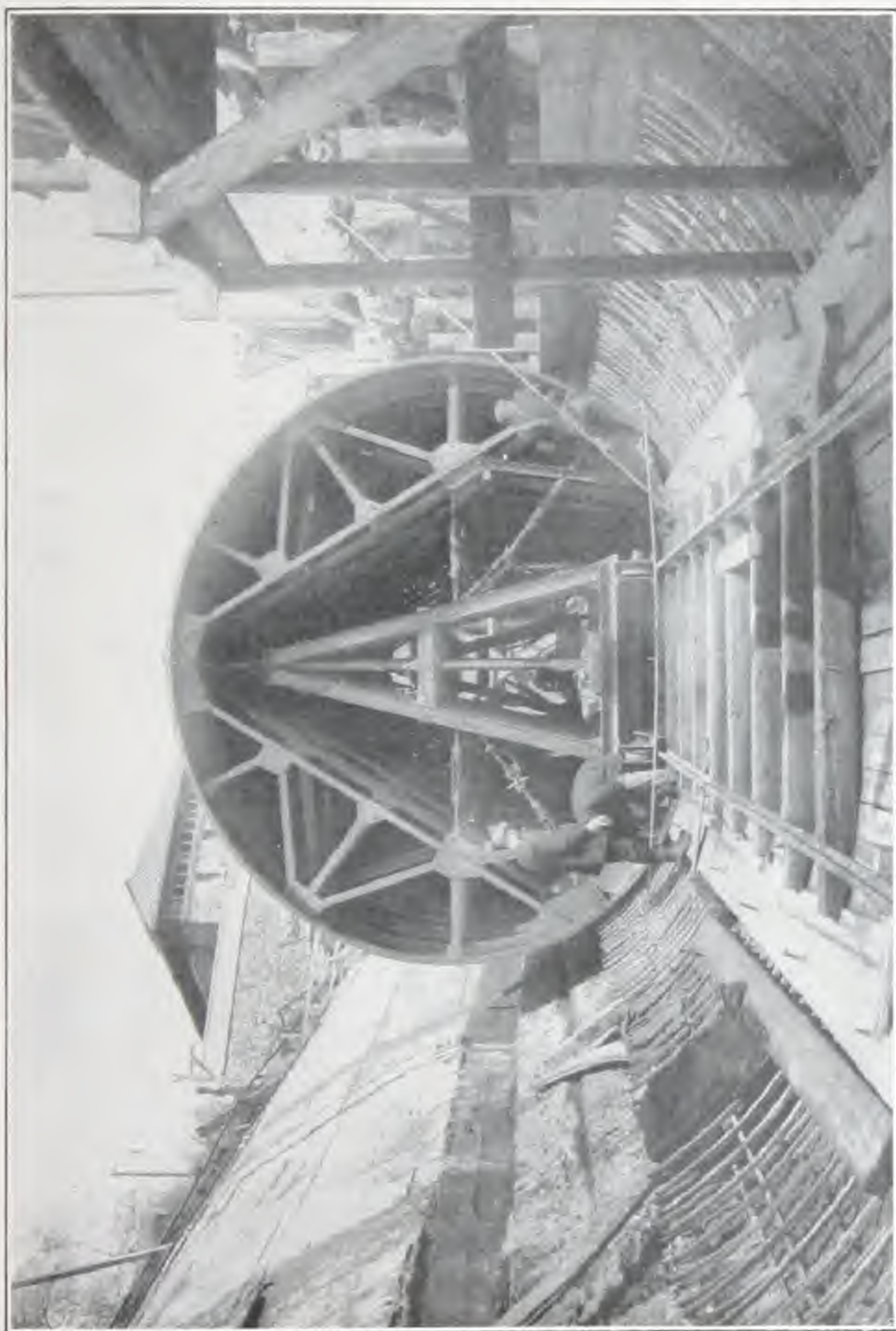


Blaw 17-foot by 17-foot 6-inch Standard Telescopic Form; Carskill Aqueduct. This Cut Shows a Unit of Forms Collapsed on the Traveler and Passing Through Erected Forms. Blaw Outside Forms and Bulkhead Shown in Position



Blaw 6-foot 6-inch Drainage Tunnel Forms; Panama Canal Locks. Isthmian Canal Commission

BLAWFORMS FOR SEWERS AND CONDUITS



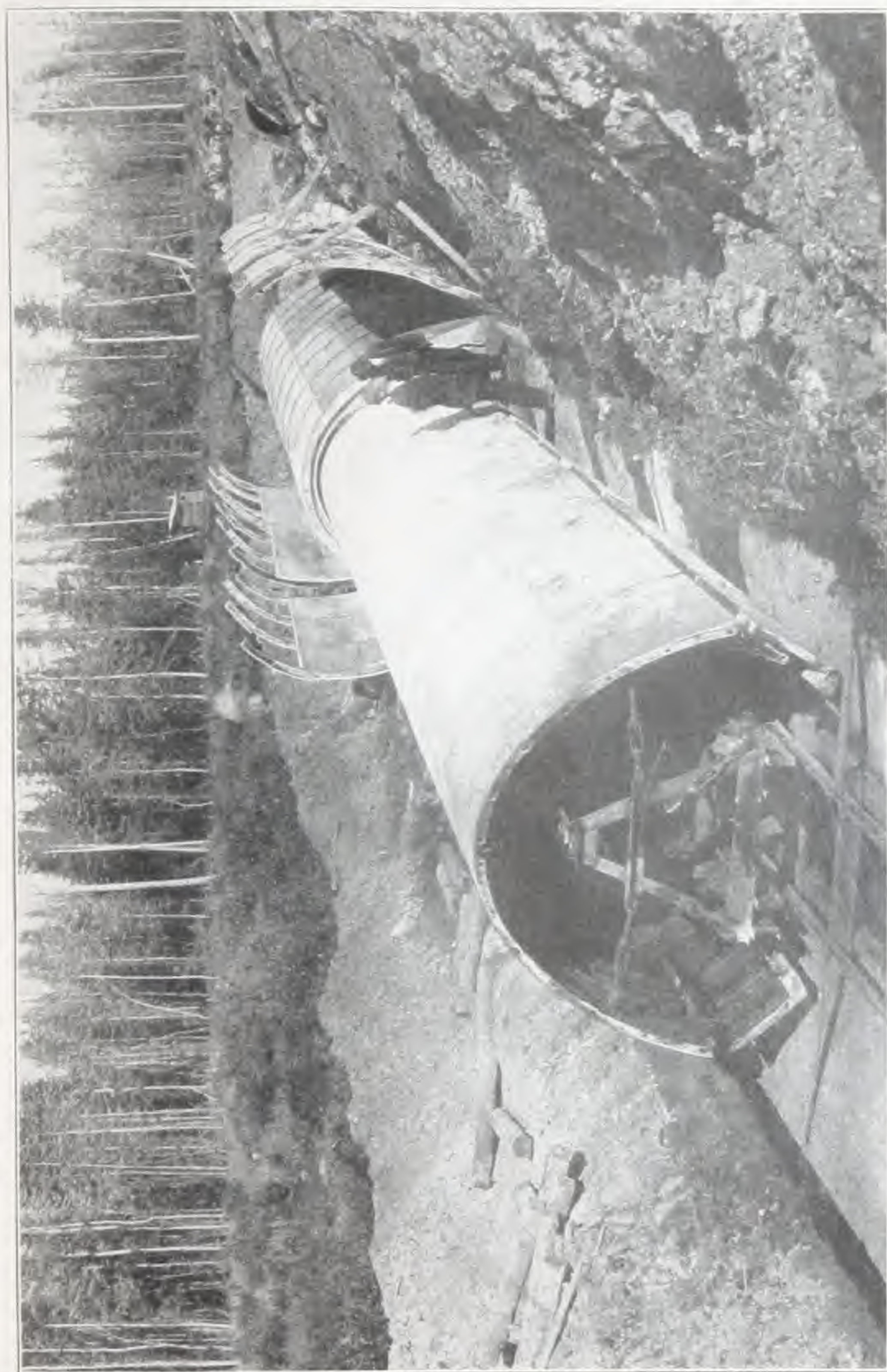
Blaw 19-foot 3-inch by 16-foot 6-inch Special Conduit Form. Niagara Falls, Canada
Ontario Power Company

BLAWFORMS FOR SEWERS AND CONDUITS



Blaw 8-foot Standard Aqueduct Forms, Winnipeg, Manitoba, Winnipeg Aqueduct Construction
Copyright, Construction News and Engineering

BLAWFORMS FOR SEWERS AND CONDUITS

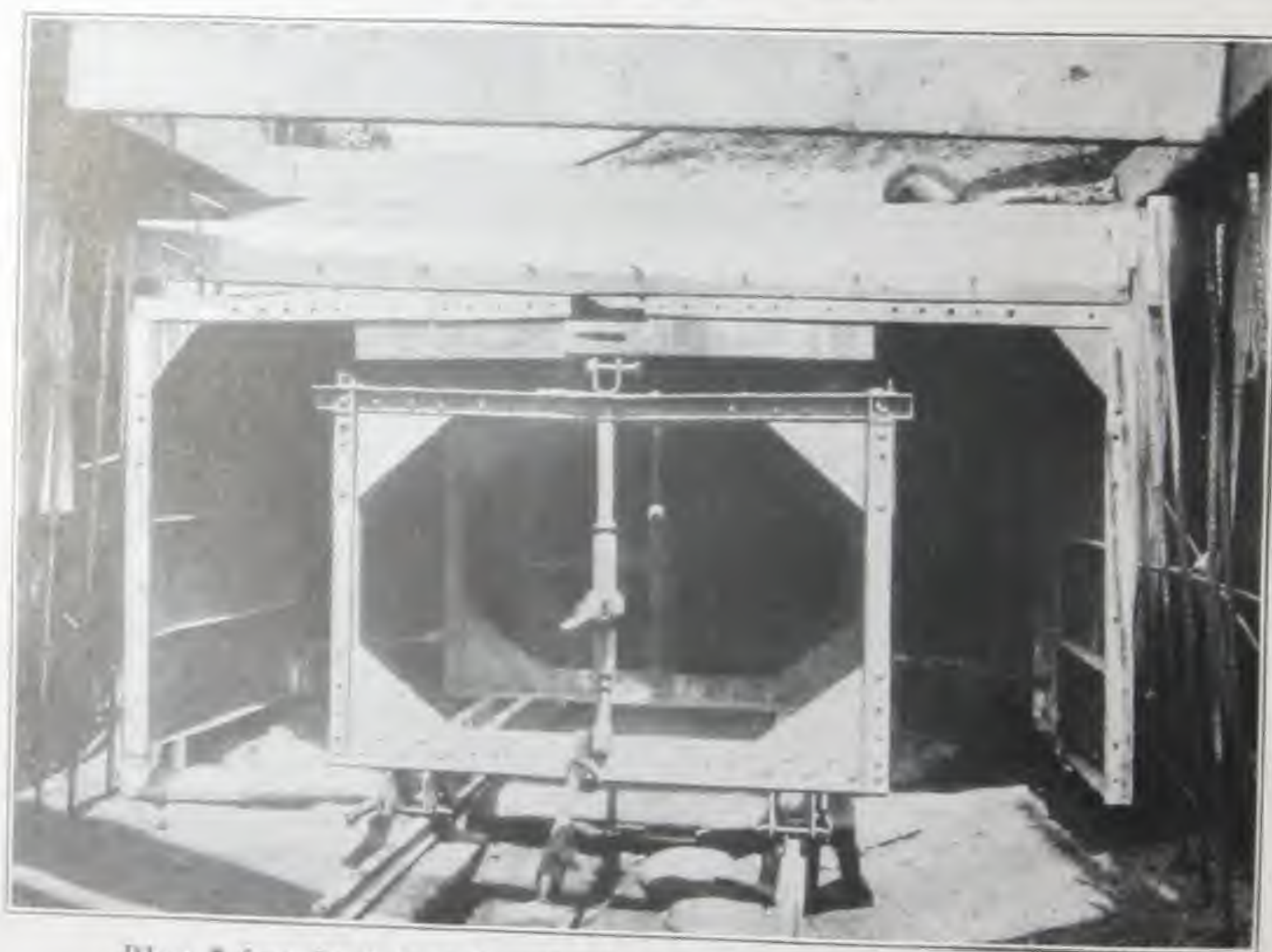


Blaw 8-foot Standard Aqueduct Forms, Winnipeg, Manitoba
Winnipeg Aqueduct Construction Company, Contractors

BLAWFORMS FOR SEWERS AND CONDUITS



Blaw Full Round Forms, Catskill Aqueduct. Note Extra Invert Forms Which are Carried Ahead with the Traveler and Erected, Forming the Track

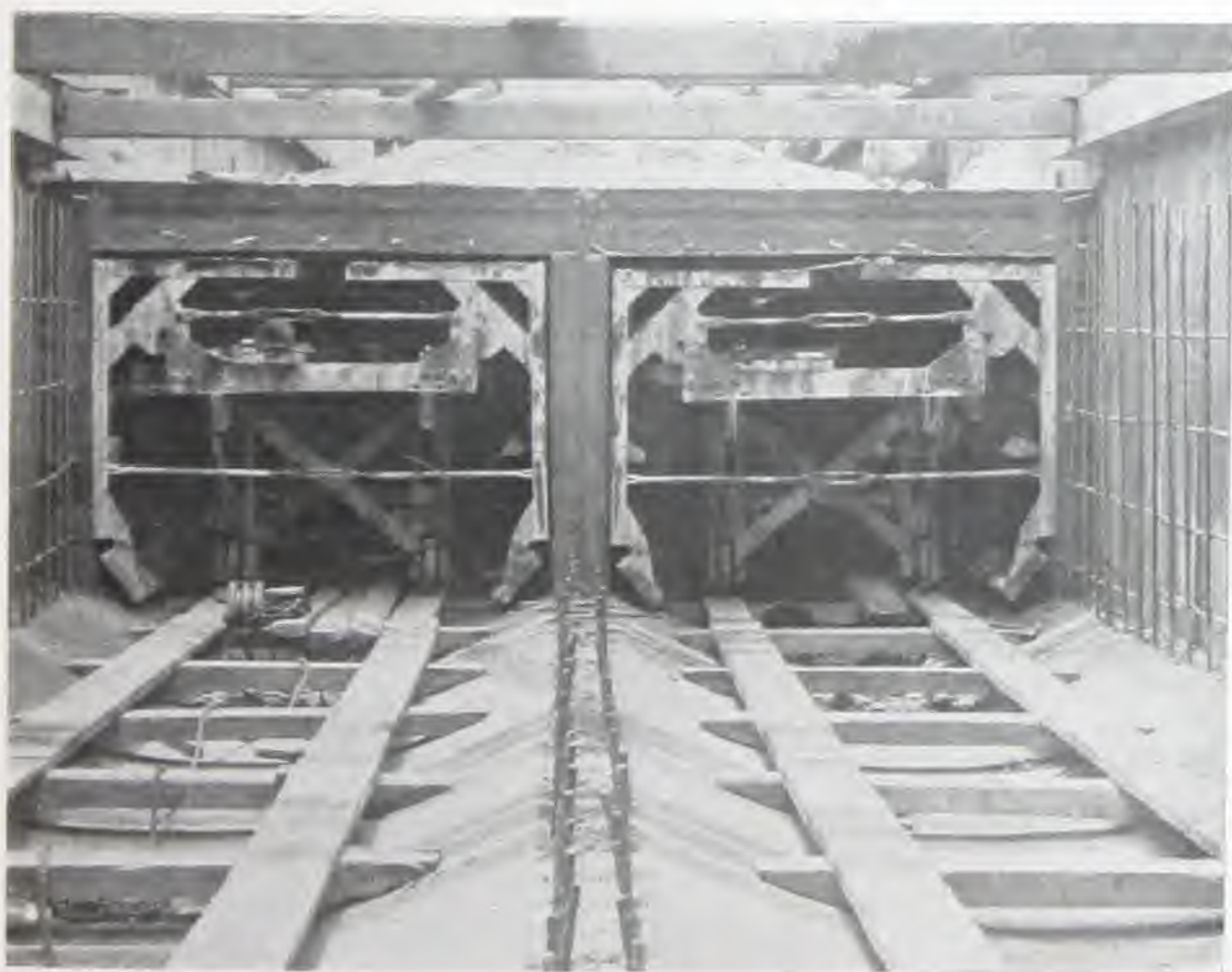


Blaw 7-foot by 8-foot Standard Box Sewer Forms, Adjustable to 7-foot by 11-foot; Boro of Queens, New York
Richard Carvel Company, Contractors

BLAWFORMS FOR SEWERS AND CONDUITS

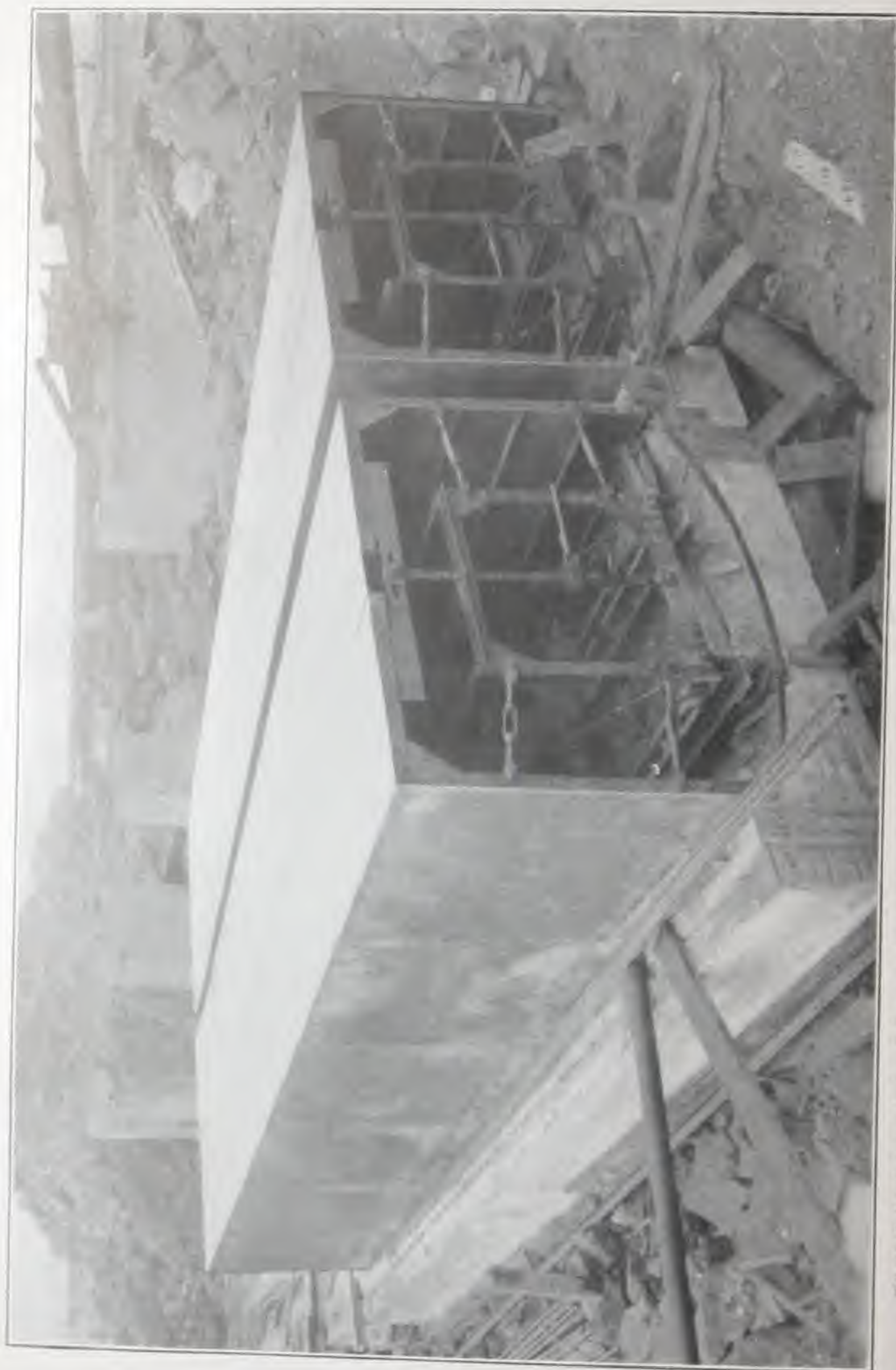


Blaw Special Telescopic and Adjustable Box Sewer Form
Atlantic City, N. J. William G. Root Construction
Company, Contractors



Blaw 7-foot by 8-foot Standard Box Sewer Form; Boro of
Brooklyn, New York. Leo E. Kelly, Inc., Contractor

BLAWFORMS FOR SEWERS AND CONDUITS



Blaw 7-foot 6-inch by 7-foot 6-inch Standard Box Sewer Form, Adjustable to 6-foot 6-inch by 8-foot 6-inch

BLAWFORMS FOR SEWERS AND CONDUITS



Figure 10. Blawform for 48-in. dia. 10-ft. long sewer. Blawform is composed of Douglas Larch Plank. Formwork is set in place by means of a derrick. The structure is built on a foundation of concrete. The structure is built on a foundation of concrete. The structure is built on a foundation of concrete.



Blawforms in New York Subway, F. L. Cranford, Inc., Contractors

TUNNELS, whether for railway traffic or for sewers or aqueducts in soft ground or in rock, require forms which permit of the greatest amount of free working space for the purpose of passing the material cars or for handling the concrete.

In our small Tunnel Forms, we use steel ribs and steel plates, which can be easily erected and taken down in small pieces and passed through the erected forms. We advise a unit form with traveler where the work is large enough to afford sufficient clearance. Forms of this kind are moved in a unit without dismantling or removing the plates.

The concrete can be placed either by pneumatic process or by hand from cars. If from cars, we usually provide working platforms with the forms to enable workmen to get well up to the top of the tunnel to make the placing of the concrete easier.

BLAWFORMS FOR TUNNELS



Blaw 12-foot Standard Tunnel Forms in Use in Lining Wilson
Avenue Water Works Intake Tunnel, City of Chicago
Pneumatic Method of Placing Concrete Used

BLAWFORMS FOR TUNNELS



Blaw 12-foot Standard Tunnel Forms, Tallulah Falls Water Power Development, Tallulah Falls, Ga. Condon, Graham and Milner, Contractors. Pneumatic Method of Placing Concrete Used

BLAWFORMS FOR TUNNELS



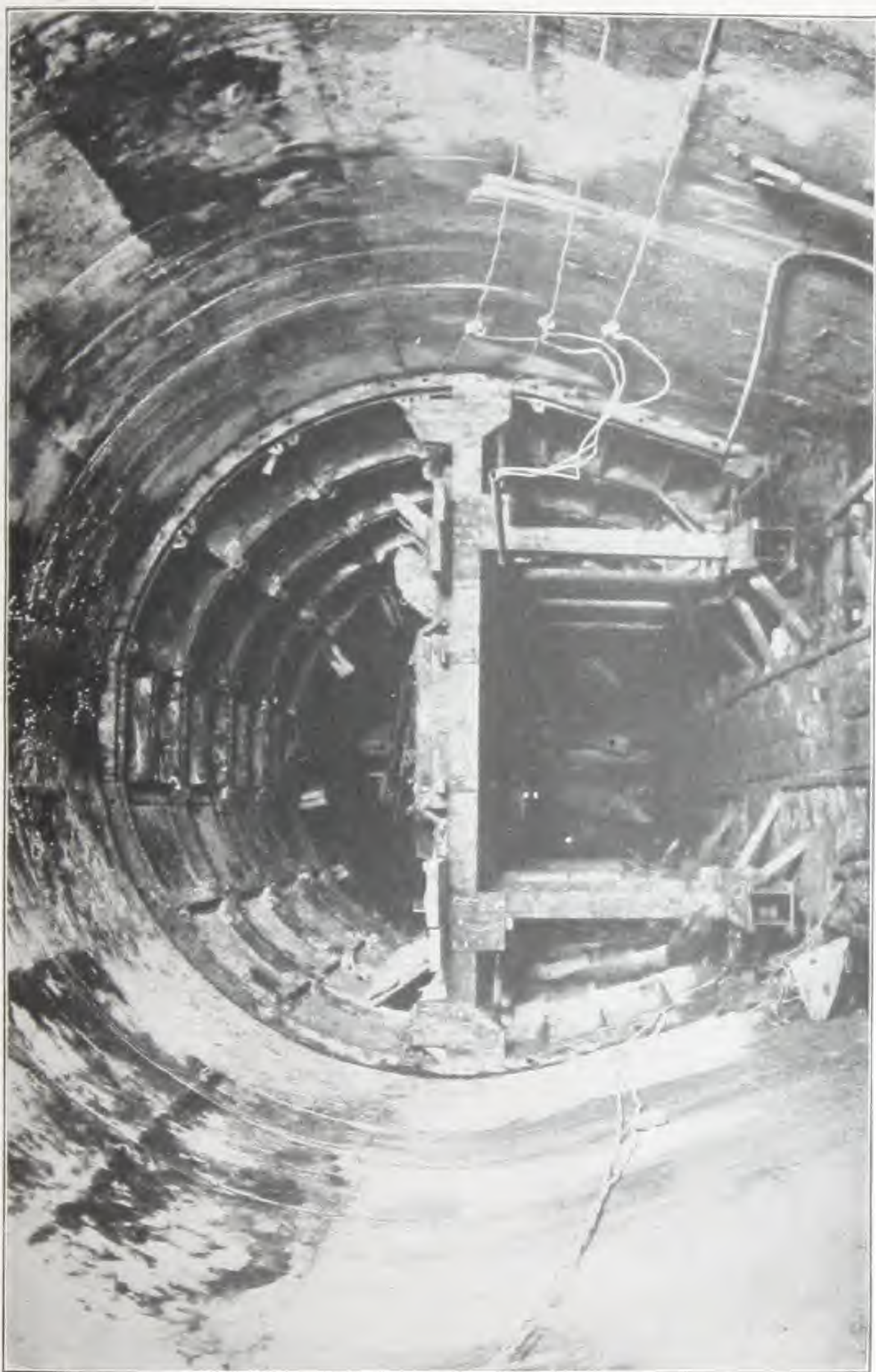
Blaw 16-foot 6-inch Standard Tunnel Forms; Mill Creek Sewer
St. Louis, Mo. Thomas Connor & Sons, Contractors

BLAWFORMS FOR TUNNELS



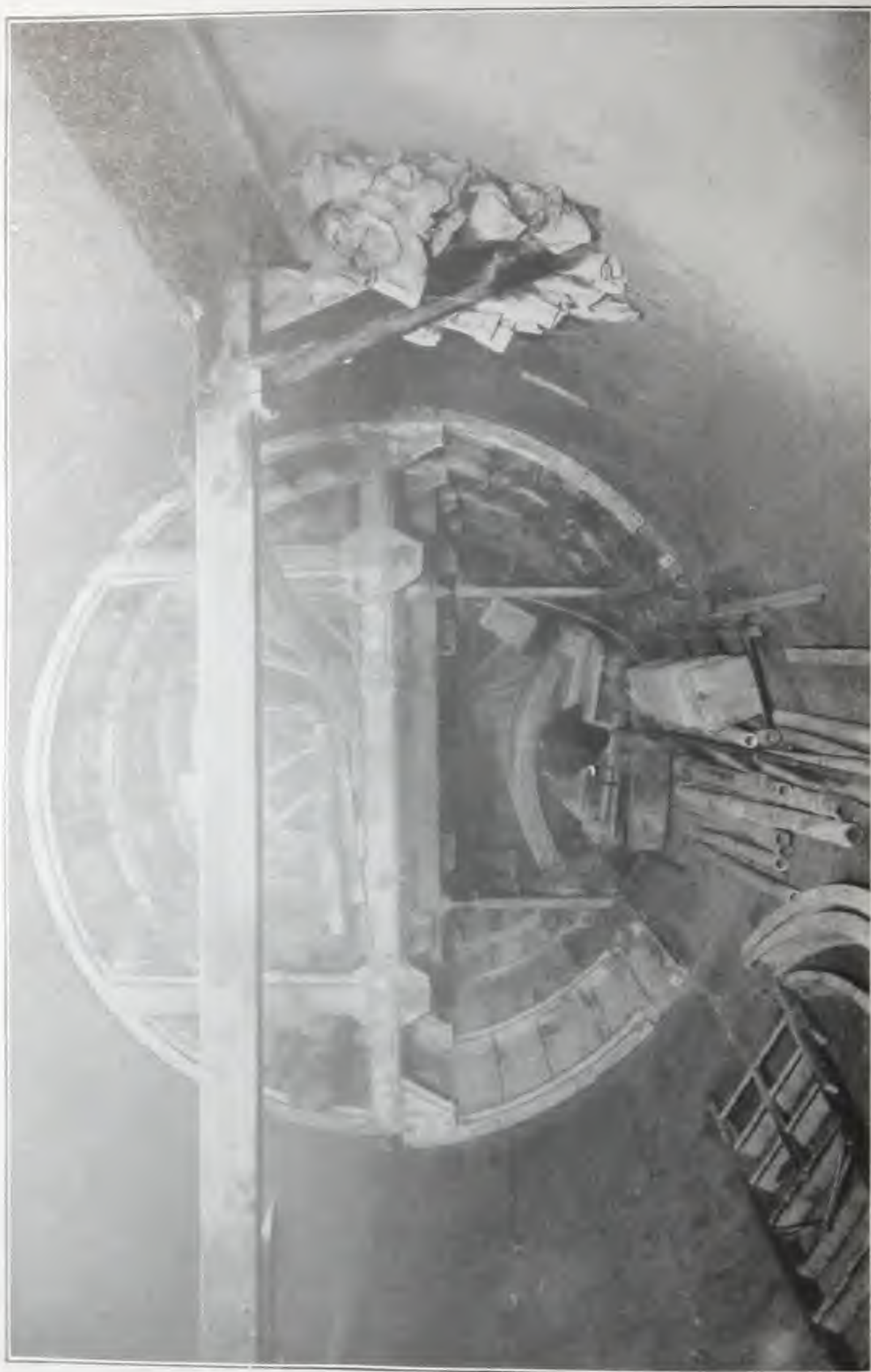
Blaw Telescopic Tunnel Forms, Vancouver, British Columbia

BLAWFORMS FOR TUNNELS



Blaw 12-foot 6-inch by 13-foot Tunnel Forms and Traveler; Shelbourne Falls Power Company
Shelbourne Falls, Mass. Frazer-Brace Company, Contractors

BLAWFORMS FOR TUNNELS



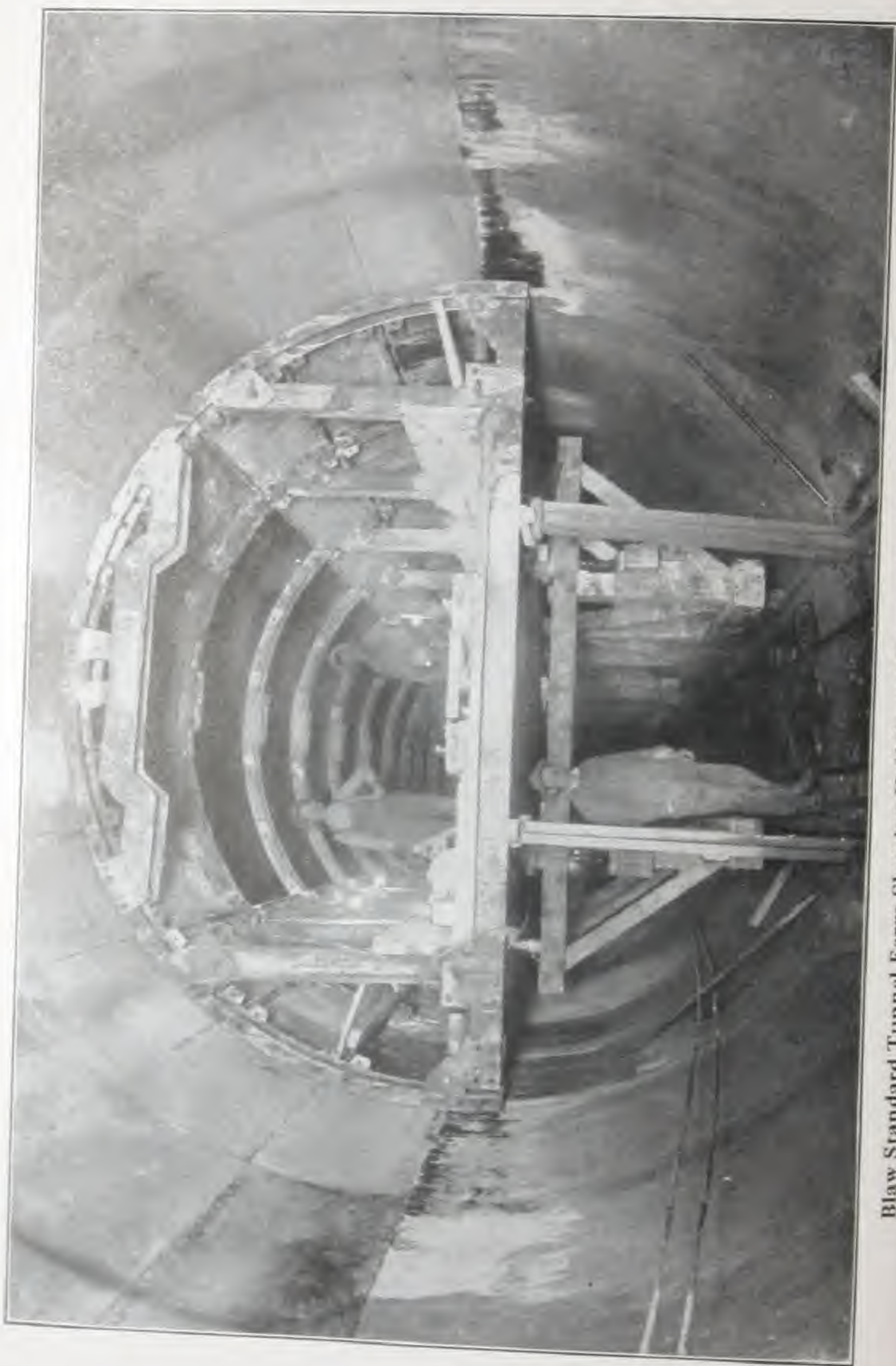
Blaw 34-Circular 13-foot 6-inch Hand Handled Tunnel Forms; Boro of Brooklyn
Litchfield Construction Company, Contractors

BLAWFORMS FOR TUNNELS



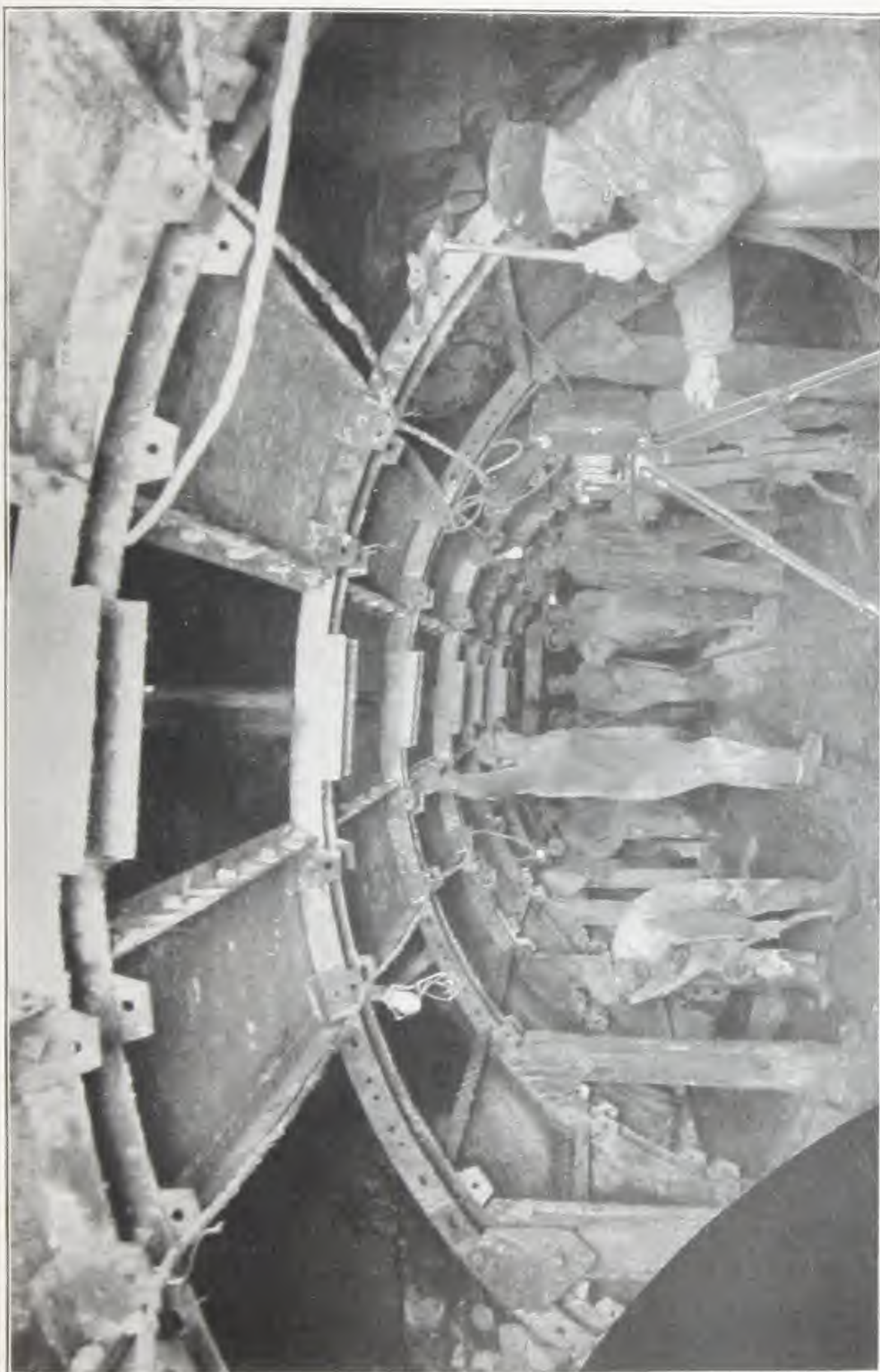
Blaw 13-foot 4-inch by 17-foot 6-inch Standard Grade Tunnel
Forms, Catskill Aqueduct

BLAWFORMS FOR TUNNELS



Blaw Standard Tunnel Form Showing Half Round Form in Position for the Crown with Lagging
Plates Removed to Receive Concrete

BLAWFORMS FOR TUNNELS



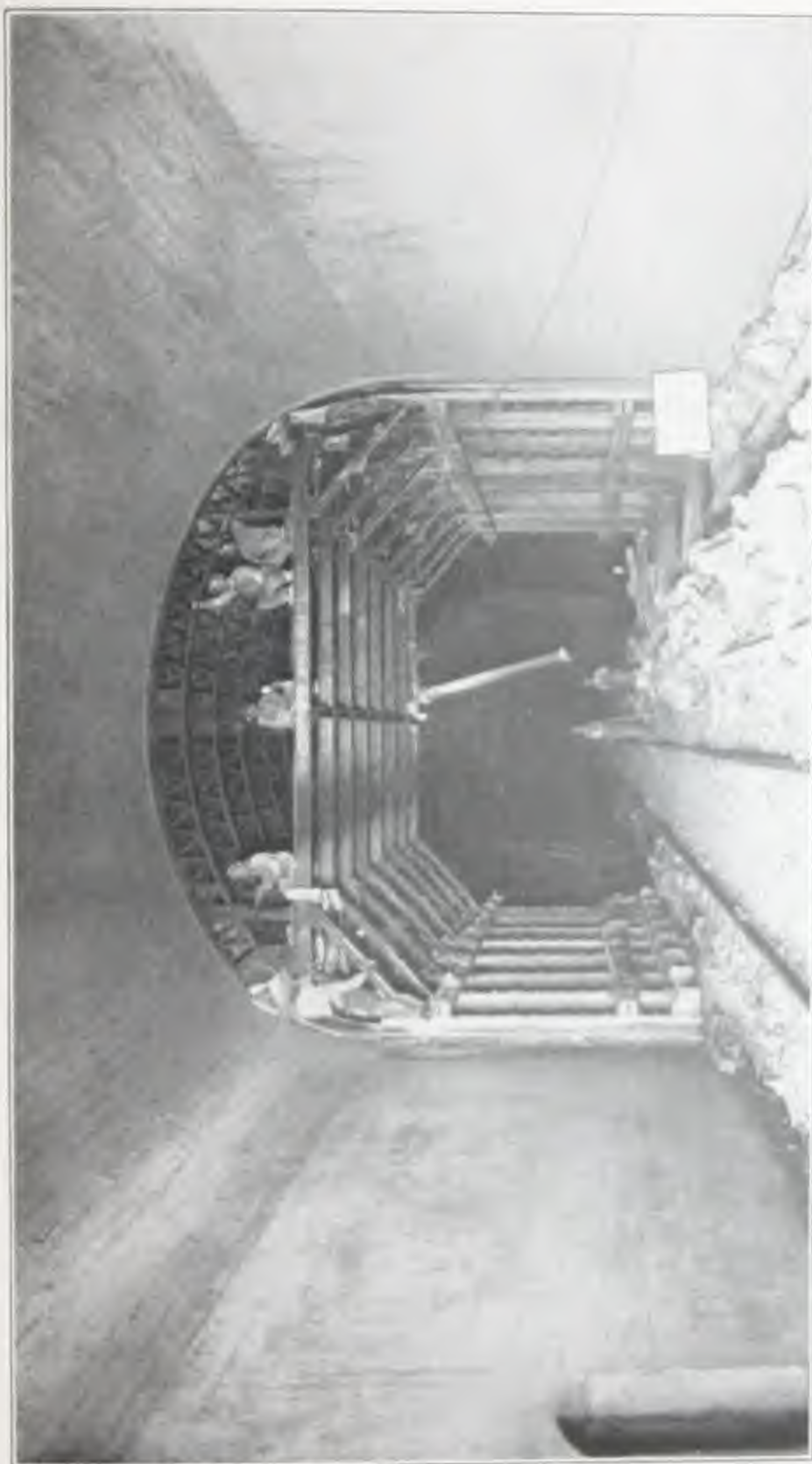
Blaw Standard Tunnel Forms on Catskill Aqueduct. Note Lagging Plates Removed for Receiving Concrete, and Free Working Space on Platform



Blaw 31-foot Special Tunnel Form with Steel Side Plates and Wood Lagging on Crown Handled by Traveler; Sand Patch Tunnel, Baltimore & Ohio Railroad. H. S. Kerbaugh, Inc., Contractor

BLAWFORMS FOR TUNNELS

Blaw 31-foot Special Tunnel Form with Steel Side Plates and Wood Lagging on Crown Handled by Traveler; Sand Patch Tunnel, Baltimore & Ohio Railroad. H. S. Kerbaugh, Inc., Contractor



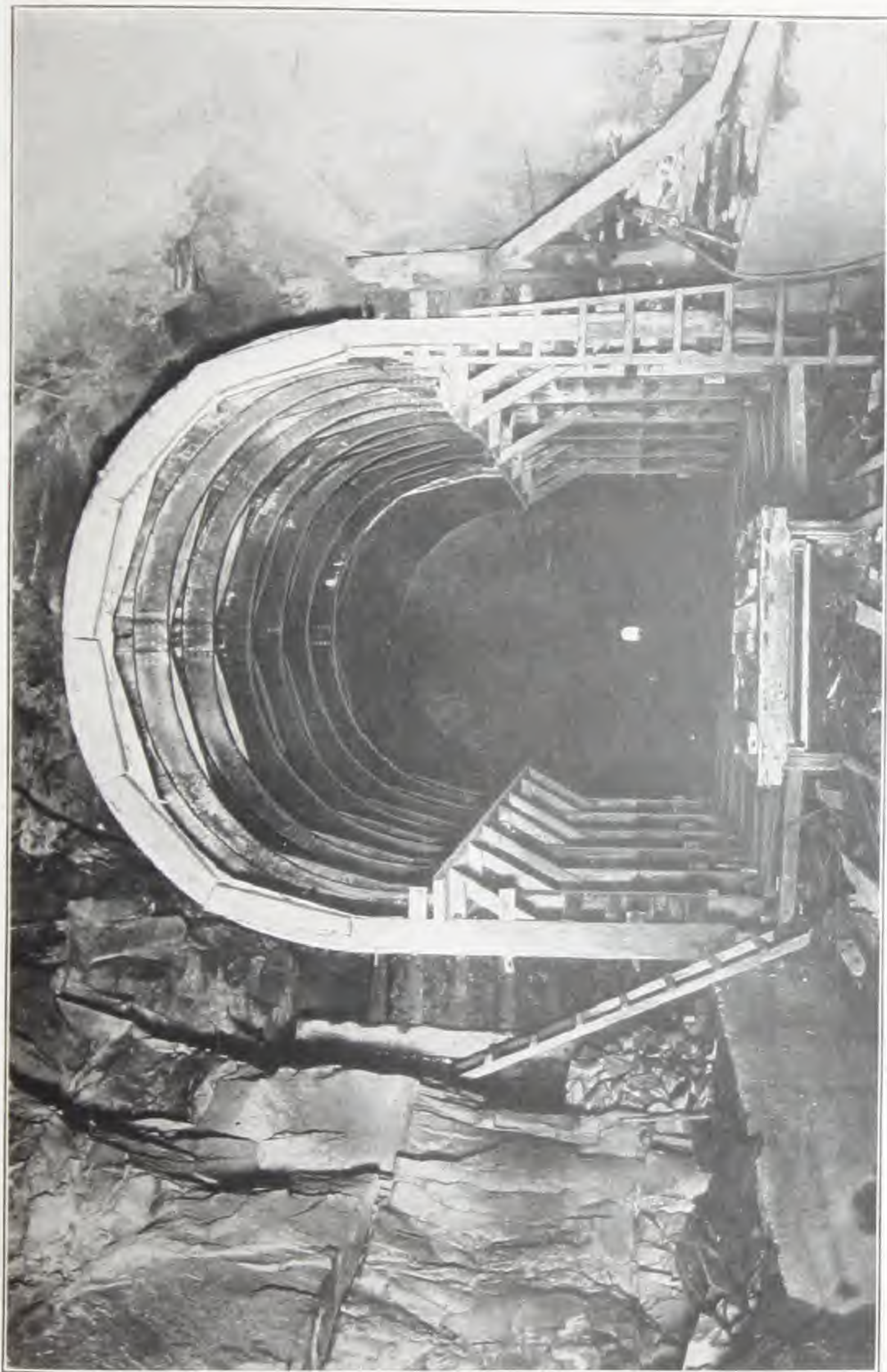
Blaw Tunnel Forms in Diana Tunnel, Louisville & Nashville Railroad near Pulaski, Tennessee
Trains Went Through Tunnel Constantly While Concreting Was in Progress
Mearns Contracting Company, Contractors

BLAWFORMS FOR TUNNELS



Blaw Tunnel Forms Showing Invert Forms and Hoist for Elevating Concrete to Working Platform
Astoria Tunnel, Astoria Light, Heat & Power Company, New York

BLAWFORMS FOR TUNNELS



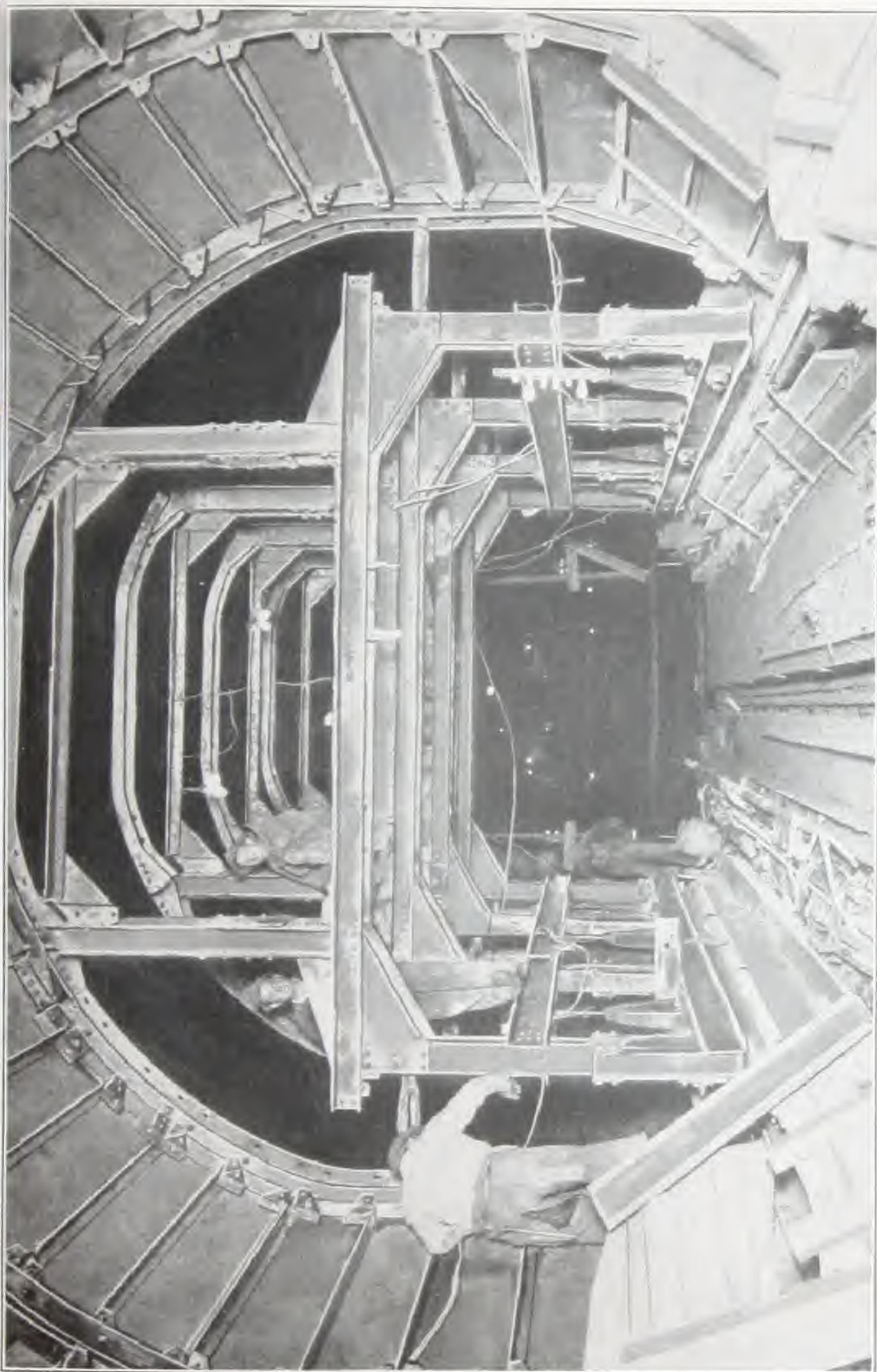
Blaw Single Track Railroad Tunnel Form; Carolina, Clinchfield & Ohio Railroad
Note Clearance Through These Forms for Passage of Concreting Plant

BLAWFORMS FOR TUNNELS



Blaw Telescopic Tunnel Form, Handled in 15-foot Units on Traveler. Traveler Spans Blaw Belt Conveyor Shown in Foreground. Dorchester Tunnel, Boston, Mass., Subway. Patrick McGowan & Company, Engineers, Boston, Mass.

BLAWFORMS FOR TUNNELS



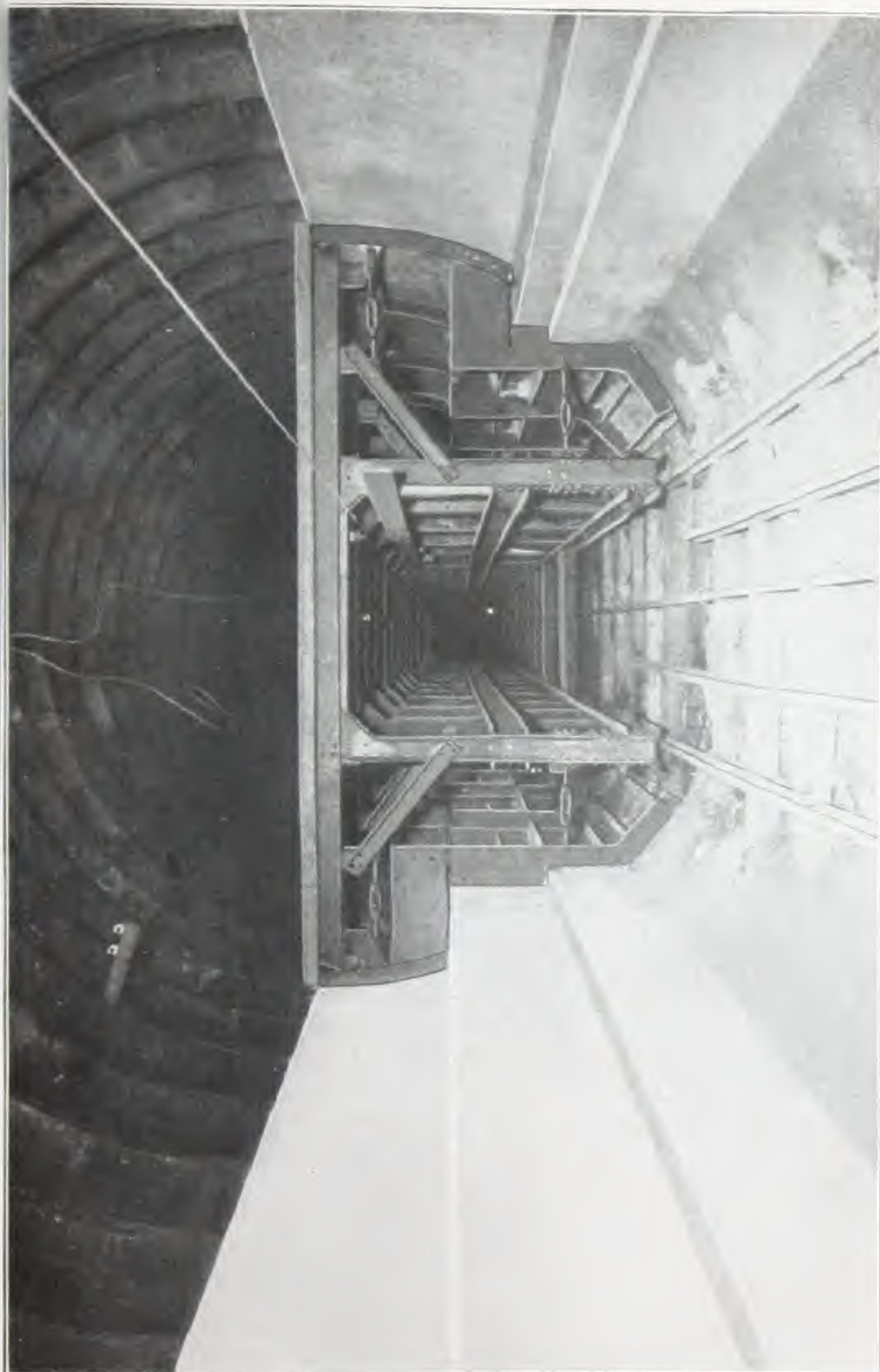
Blaw Telescopic Tunnel Form Showing Clear Working Space Through Traveler; Dorchester Tunnel
Boston, Mass., Subway. Patrick McGovern & Company, Contractors

BLAWFORMS FOR TUNNELS



Blaw 76-inch Full Round Hand Handled Tunnel Forms, Showing Ribs in Position Ready for Lagging Plates
See accompanying article on page 44 for description of Blaw 76-inch Full Round Hand Handled Tunnel Forms

BLAWFORMS FOR TUNNELS



Blaw Tunnel Forms Showing Side Wall Forms with Continuous Traveler in New York City Subways
Flinn-O'Rourke Company, Inc., Contractors



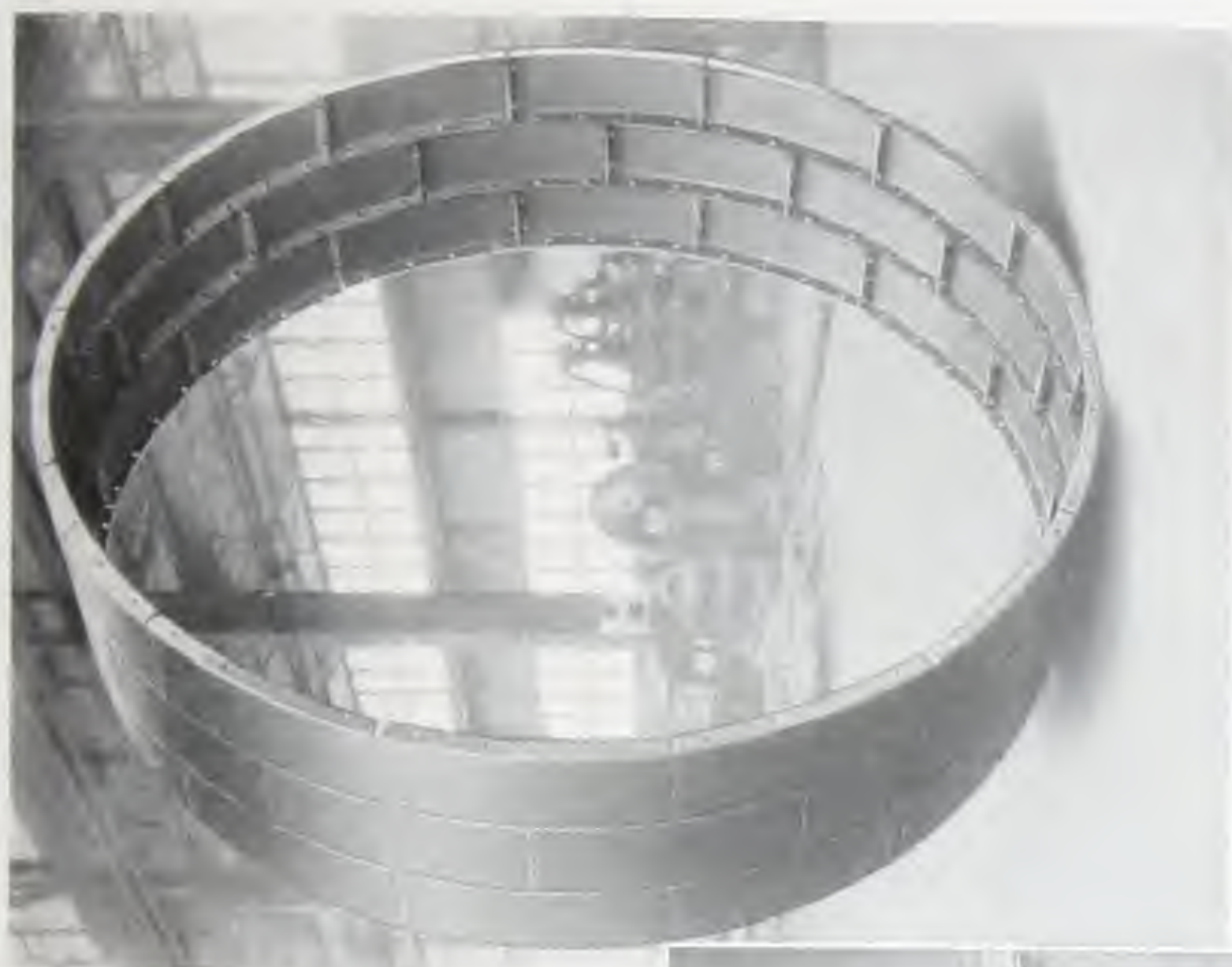
Blaw Tunnel Liner Plates; Milwaukee, Wisconsin
John F. Casey Company, Contractors

BLAW Tunnel Liner Plates are used in soft ground tunnels to take the place of timbering. The timbering of soft ground tunnels is a laborious and dangerous operation. With Blaw Tunnel Liner Plates the amount of excavation is very greatly lessened. The element of danger is also decreased, in that the plates are interlocking with connecting bolts through the flanges of the plates.

The plates are provided with flanges from 2 inches to 2½ inches deep. They are from 2 feet 6 inches to 3 feet long and 12 inches wide, are light and easily handled by unskilled labor. They can be used in both compressed and free air tunnels.

The cost of these plates, together with the cost of placing, is much less than timbering, when the saving in excavation and extra concrete is considered.

BLAW TUNNEL LINER PLATES



Three Sections of Blaw Tunnel Liner
Plates for 8-foot Tunnel



Blaw Tunnel
Liner Plates and
Blaw Tunnel
Forms in Sewer
Tunnel Construc-
tion, Boro of
Brooklyn, N. Y.
Litchfield Con-
struction Comp-
any, Contractors.

BLAW TUNNEL LINER PLATES



Blaw Tunnel Liner Plates, Wilson Avenue Tunnel, Chicago



Blaw Tunnel Liner Plates and Blaw Standard Half Round Sewer Forms
in Tunnel Construction; Milwaukee, Wisconsin
John F. Casey Company, Contractors

Blaw

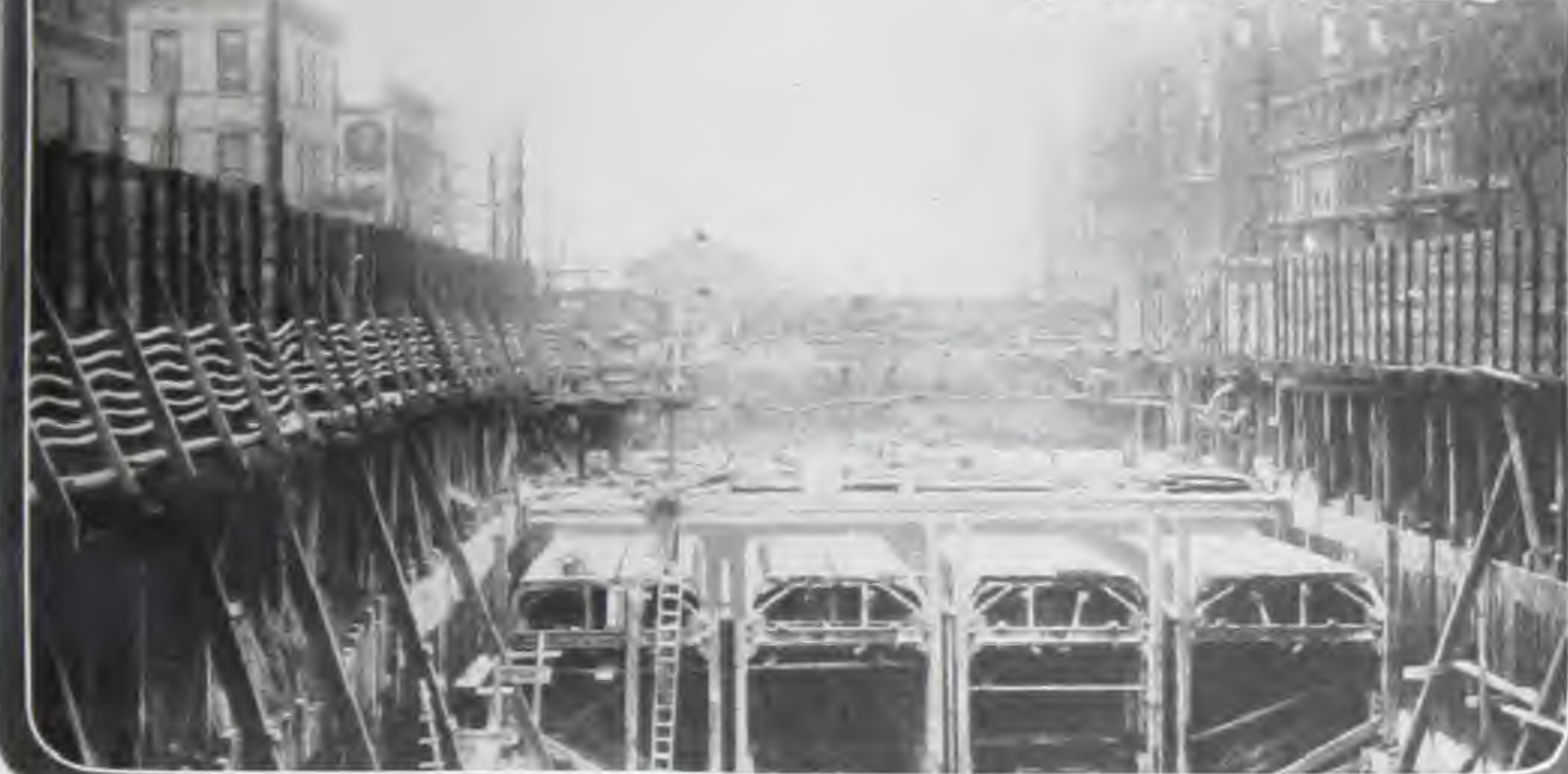
Blaw Forms
Tidewater

THE g
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Subways
Blawforms
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Walls betw
Arched Ro
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are handle
deep shafts

Blawforms for SHAFTS AND SUBWAYS



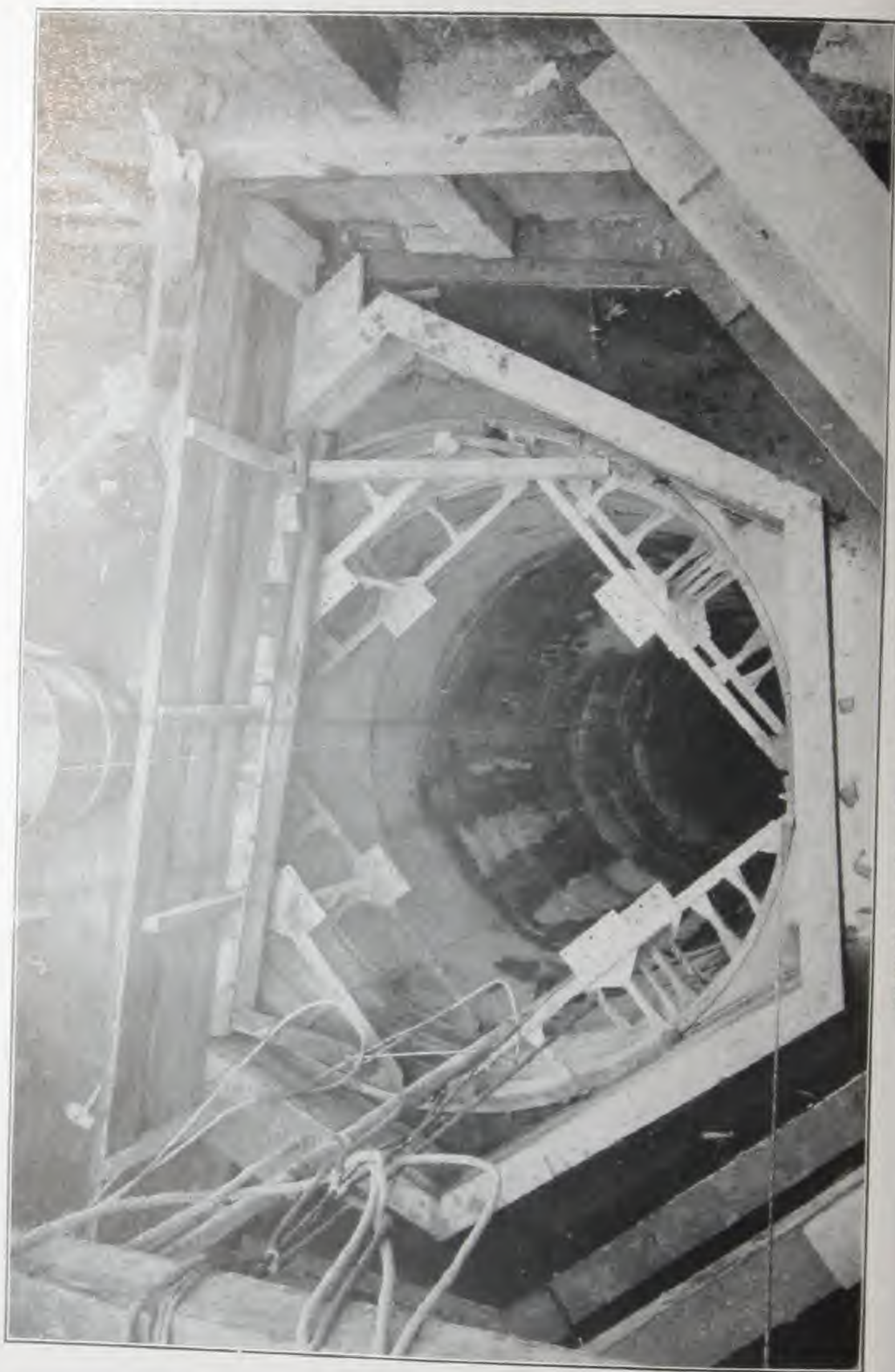
Blaw Forms on Fourth Avenue, Brooklyn, N. Y., Four-track Subway
Tidewater Building Company & Thomas B. Bryson, Contractors

THE great economies and superior results obtained by Blawforms in Subway Construction in recent years, have been so marked that such structures are now usually designed with a view towards using steel forms. Mechanically Operated Travelers simplify the processes of shifting and make it possible to move large areas very quickly, without obstructing other parts of the work.

Subways differ very materially in some cases in their design. Blawforms have been used in Subway Construction of all kinds, on Plain Concrete Side and Center Walls, Jack Arch Walls between Structural Steel Members, Columns, Simple Arched Roofs, Jack Arch Roofs between Steel Beams, and Flat Reinforced Concrete Roofs, with a simplification of the work and a distinct saving in every case.

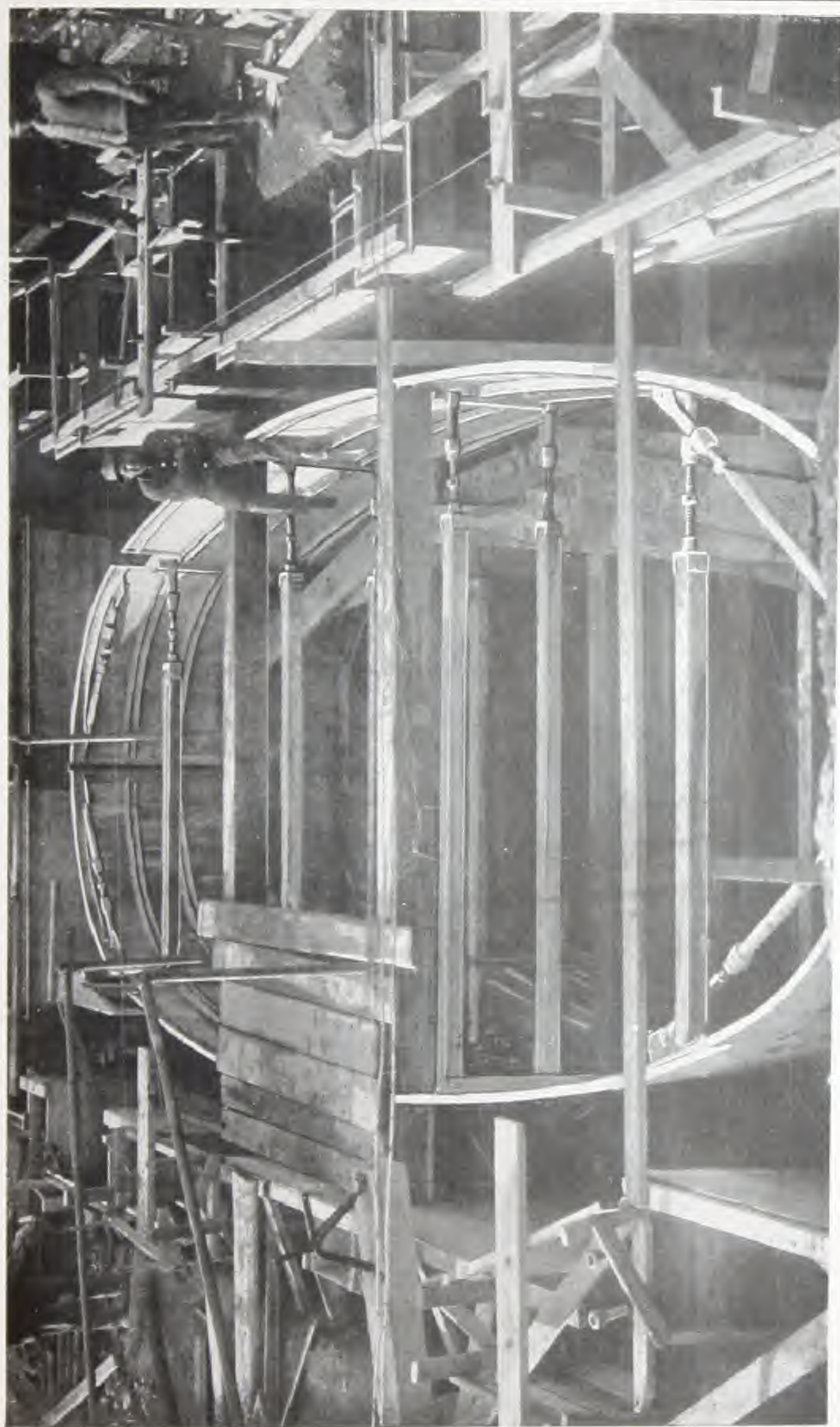
In Shaft Lining, the speed and ease with which Blawforms are handled, render them extremely desirable, especially for deep shafts.

BLAWFORMS FOR SHAFTS AND SUBWAYS

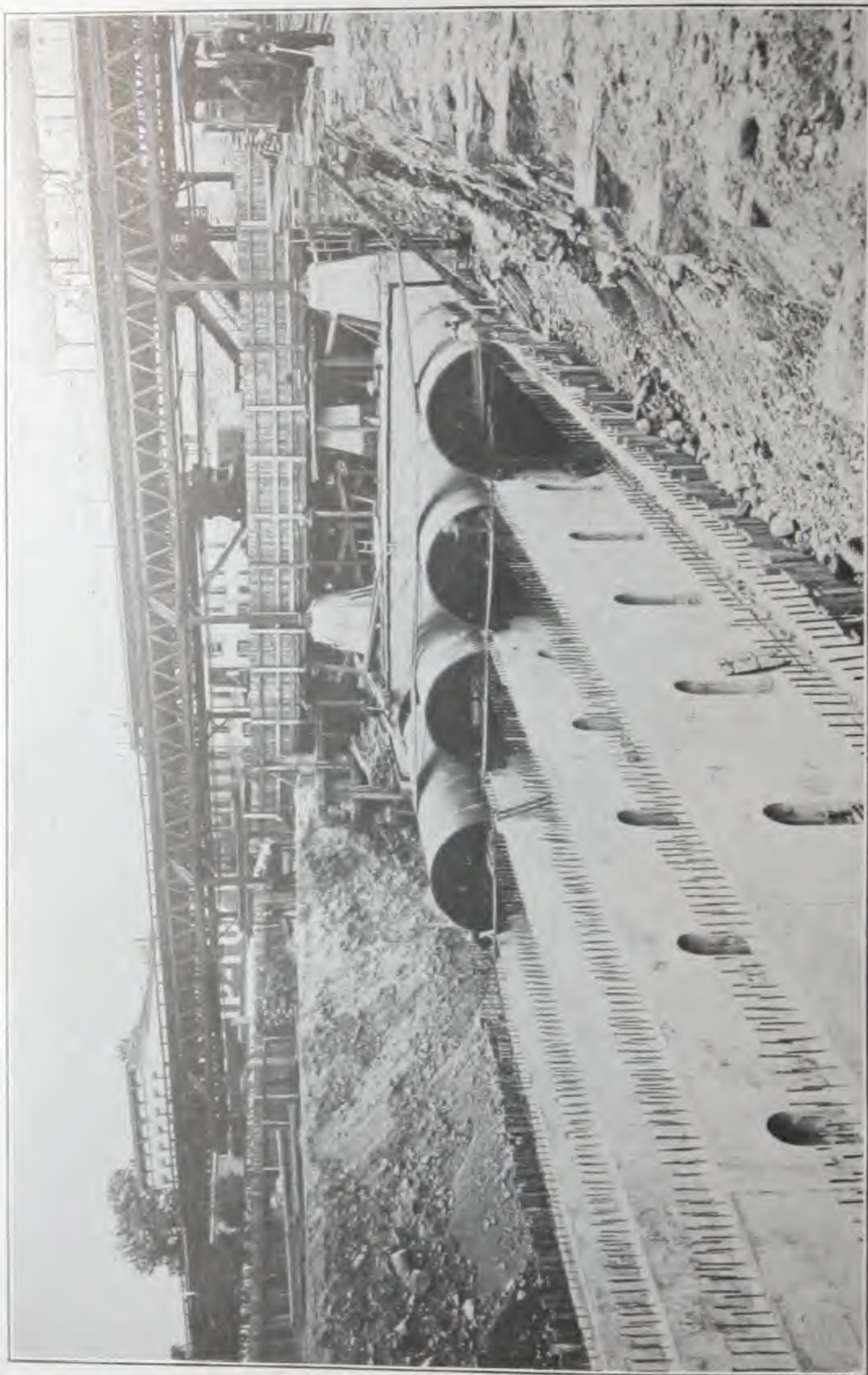


Blaw 14-foot Standard Shaft Forms, Catskill Aqueduct

BLAWFORMS FOR SHAFTS AND SUBWAYS



Blaw Special Shaft Forms, Filbert, Pa. H. C. Frick Coal Company



Blaw Special Subway Forms Showing Sections Set Ready for Concrete. Crown Sections and Side Wall Forms Handled with Separate Travelers; Long Island R.R. Subways, Boro of Brooklyn, N. Y.
W. H. Gahagan, Inc., Contractor

BLAWFORMS FOR SHAFTS AND SUBWAYS

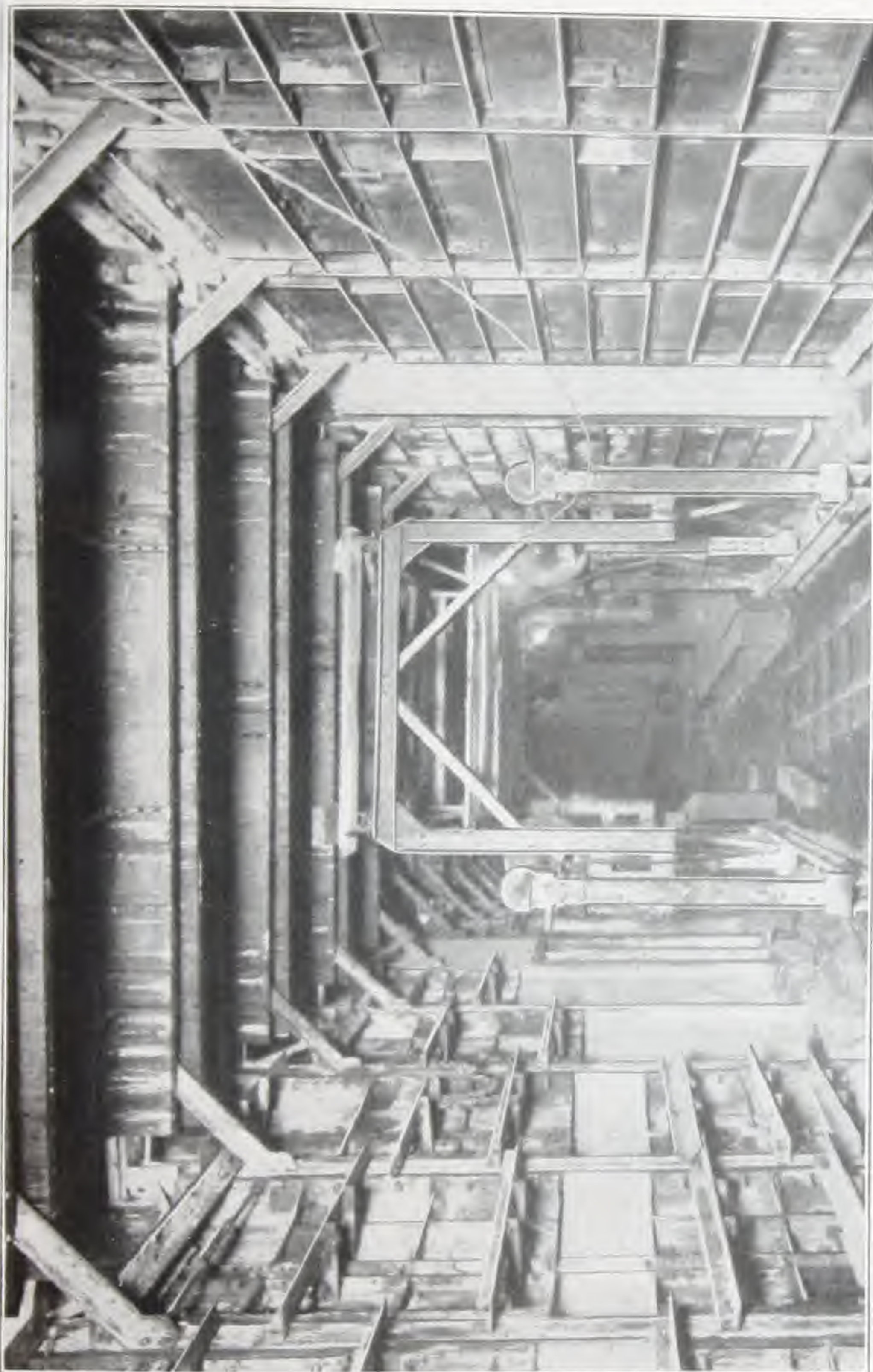


Blaw Adjustable Jack Arch Forms, Fourth Avenue Subway, Brooklyn, N. Y.
Smith, Scott, Hannan & Hickey Company, Contractors

BLAWFORMS FOR SHAFTS AND SUBWAYS



Blaw Subway Forms, Sea Beach Line, New York Subways. N. L. Kennedy, Inc., Contractor



Blaw Standard Subway Forms for Concreting between Steel Work, New York Subways. This Type of Form is Extensively Used on All Subway Construction of This Class. The Jack Arch Forms Are Telescopic and Handled on Traveler. The Side Arch and Center Wall Forms are Handled by Hand

Blawforms for Heavy Walls



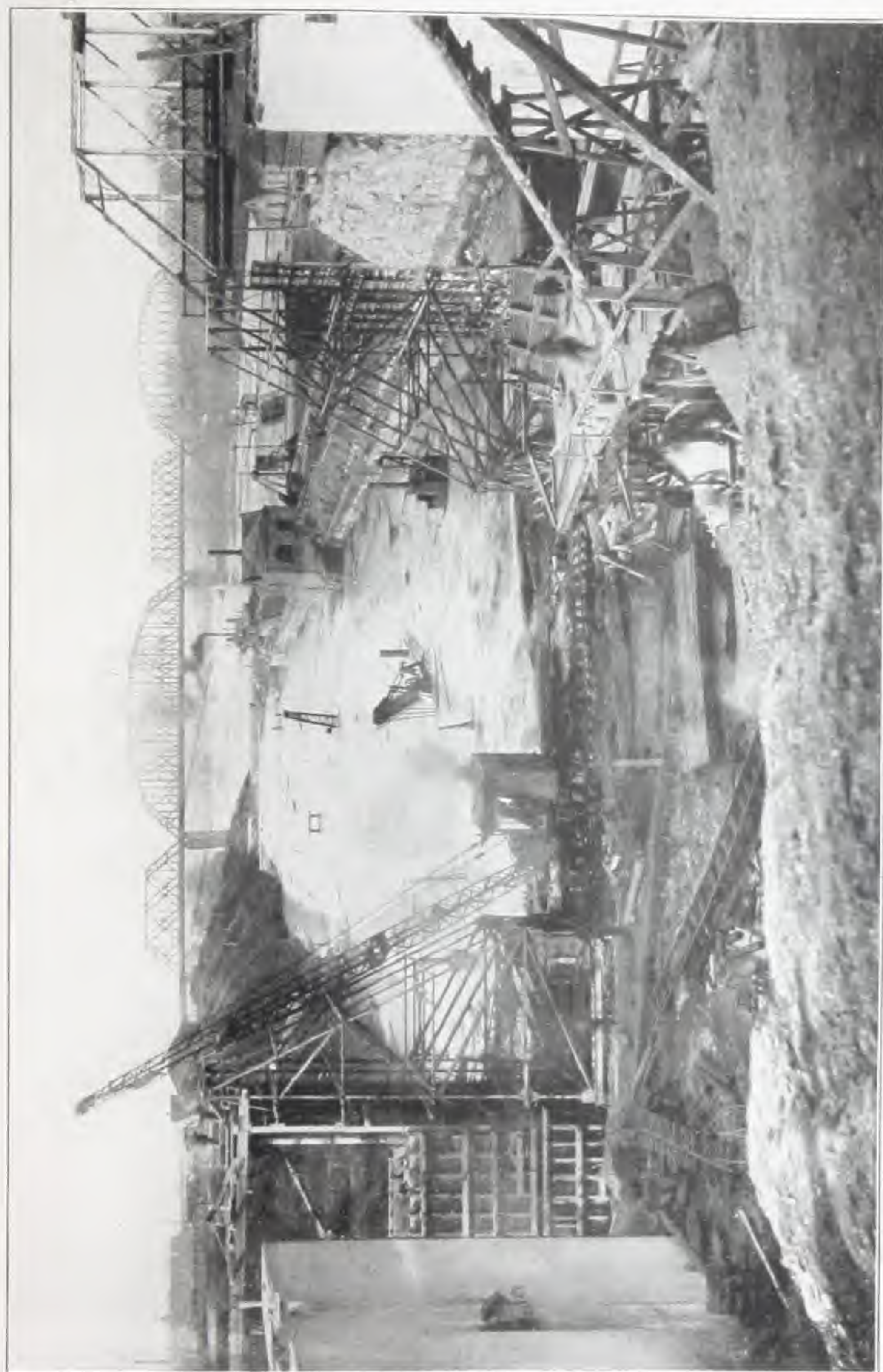
Blaw Heavy Wall Forms and Travelers at Lock 41, Ohio River, Louisville, Ky.
Ohio River Contract Company, Contractors

BLAW Heavy Wall Forms are used in the construction of Dams, Piers, Abutments, Retaining Walls, Water Towers, Reservoirs and similar structures. A number of types, from which you may select the one best suited for your work, are always kept in stock.

In constructing Retaining Walls or walls of sufficient length, the most economical method of handling the work is by means of a traveler in connection with the forms. These travelers either span the wall with a rail on each side on which the traveler runs, or are of the cantilever type, where the rails are on one side of the wall and the overhanging part of the traveler reaches beyond the wall to handle the forms on the far side. These travelers are made as an integral part of a unit of forms, or one traveler can be used in handling a number of form units.

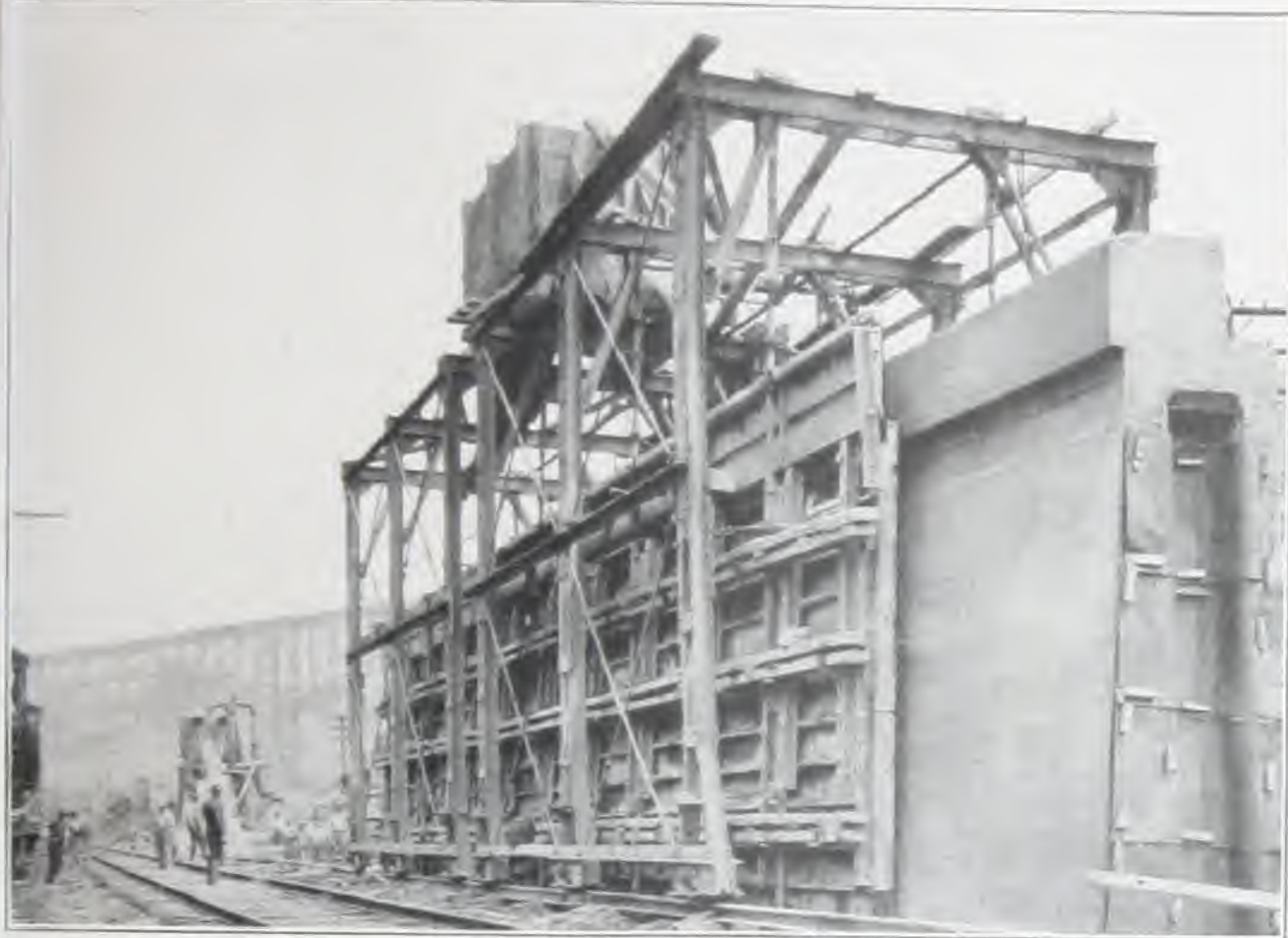
In the construction of Piers or Abutments, Blawforms can be assembled in large units up to the capacity of the locomotive crane or cable-way, or can be disassembled in smaller units and handled by hand. The Form arrangement is such that you can remove the bottom course of forms and set it on the top course without disturbing the fresh concrete or in any way interfering with the progress of the work.

BLAWFORMS FOR HEAVY WALLS



Blaw Heavy Wall Forms and Travelers in Units 52 Feet High by 50 Feet Long; Lock 41, Ohio River
Louisville, Ky. Ohio River Contract Company, Contractors

BLAWFORMS FOR HEAVY WALLS

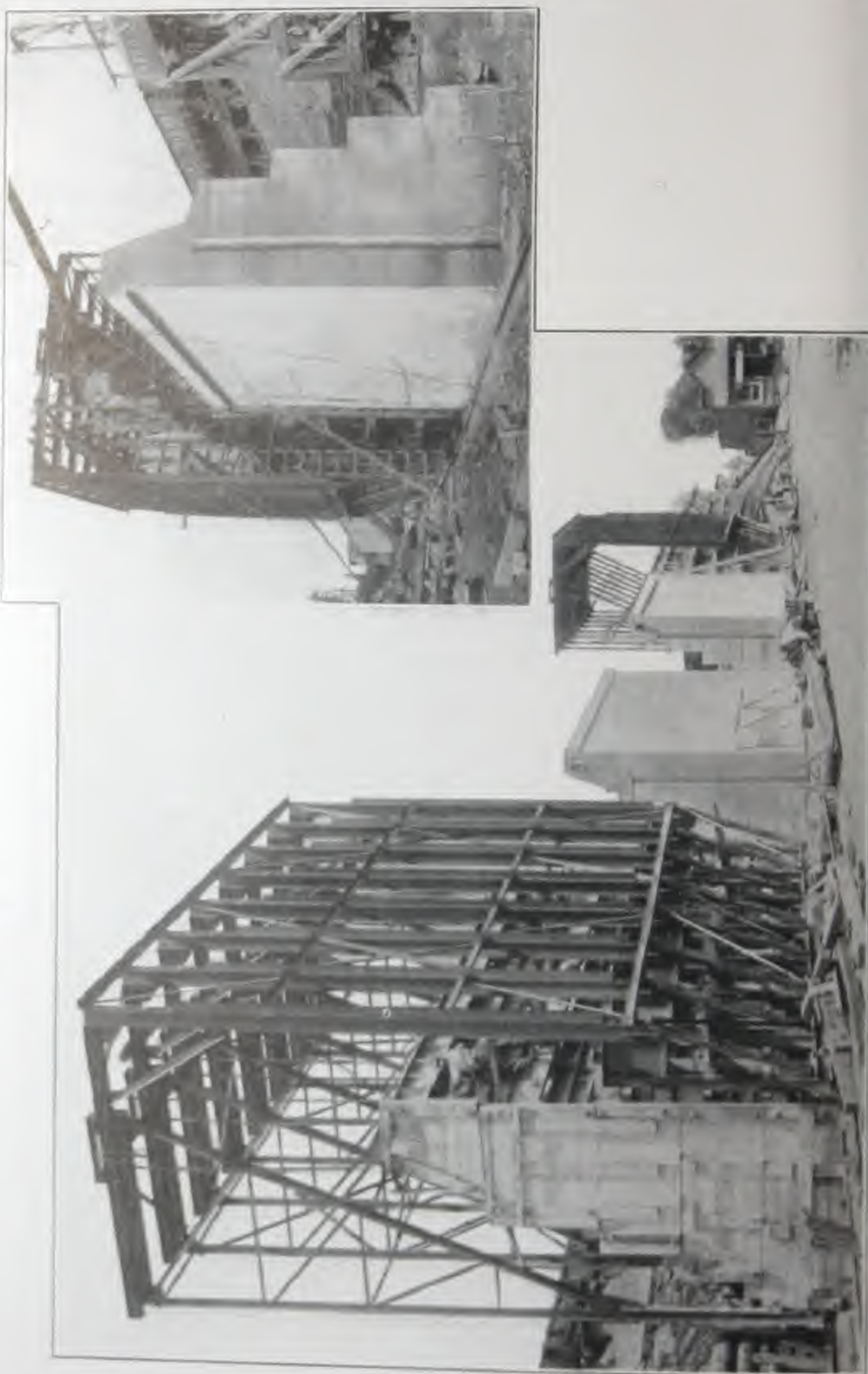


Blaw Traveling Heavy Wall Forms; Baltimore & Ohio R. R. Track Elevation
Pittsburgh, Pa. Note Forms Pulled Away from
Concrete, Ready for Moving

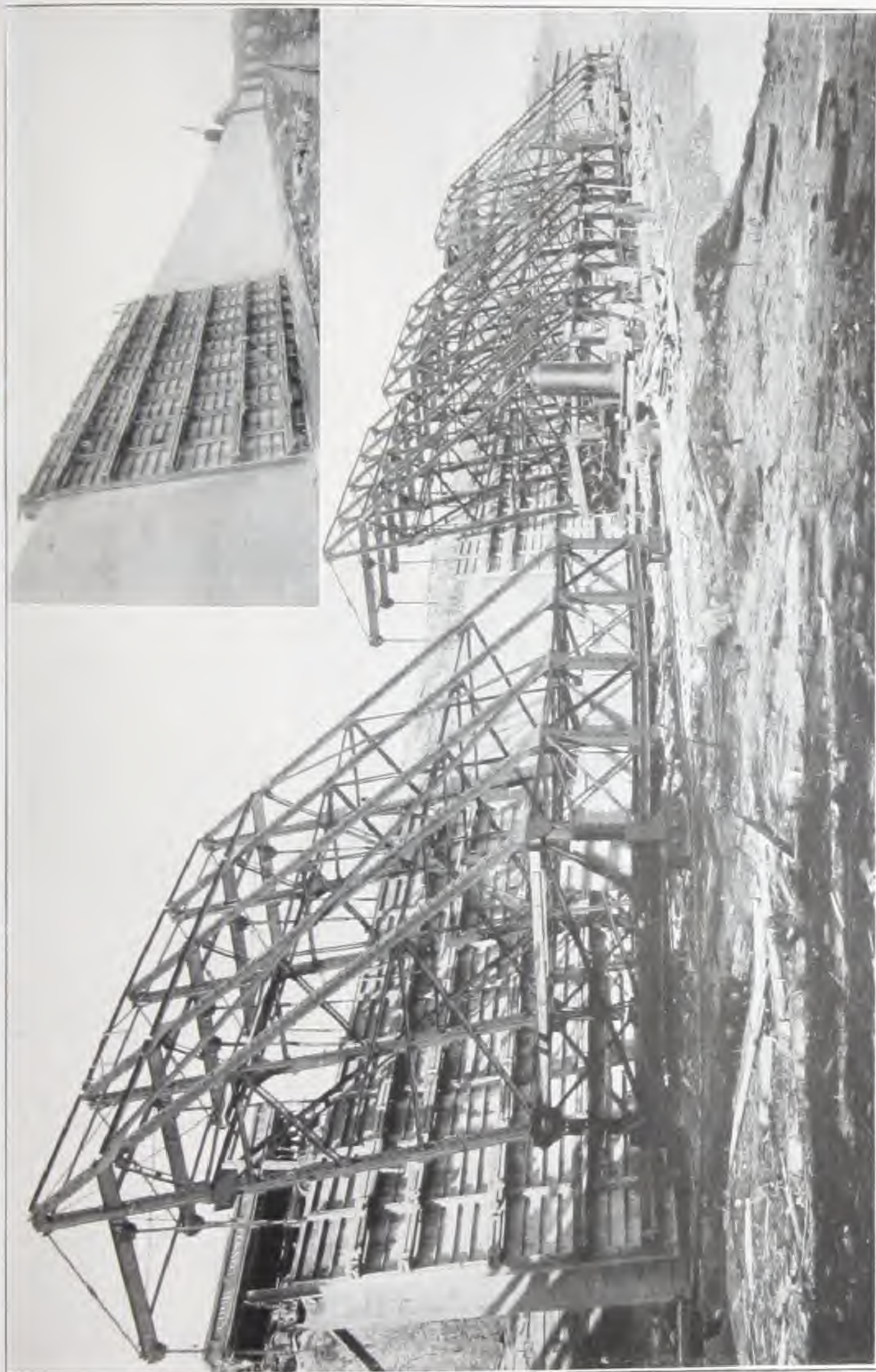


Blaw Traveling Heavy Wall Forms; Baltimore & Ohio R. R. Track Elevation
Pittsburgh, Pa. Looking Into the Forms Before
the Bulkhead is Placed

BLAWFORMS FOR HEAVY WALLS



BLAWFORMS FOR HEAVY WALLS



Blaw Traveling Heavy Wall Forms on 23-foot Wall, in 50-foot Units, Montreal Aqueduct. These Forms Are Detachable from the Traveler. One Traveler Handles a Number of Sections of Forms. Cook Construction Company, Contractors.

BLAWFORMS FOR HEAVY WALLS





Blaw Traveling Heavy Wall Forms on Retaining Wall on Entrance Canal, Lock 41, Ohio River
Louisville, Ky. Henry Bickel Company, Contractors

BLAWFORMS FOR HEAVY WALLS



Blaw Heavy Wall Forms in Units 50 Feet High by 30 Feet Long. Forms Stripped from Concrete Ready for

BLAWFORMS FOR HEAVY WALLS



Blaw Traveling Heavy Wall Forms in Units 50 Feet High by 30 Feet Long, Showing End Elevation. Moved Ahead and Ready to Line Up for Next Section. Lock 4, Sault Ste. Marie, Michigan
Oscar Daniels Company, Contractors

BLAWFORMS FOR HEAVY WALLS



Blaw Traveling Heavy Wall Forms; Sea Beach Line, New York Subways. N. L. Kennedy, Inc., Contractor

BLAWFORMS FOR HEAVY WALLS



Blaw Traveling Heavy Wall Forms on Calumet Sag Channel, Chicago. Winston Brothers, Contractors

BLAWFORMS FOR HEAVY WALLS



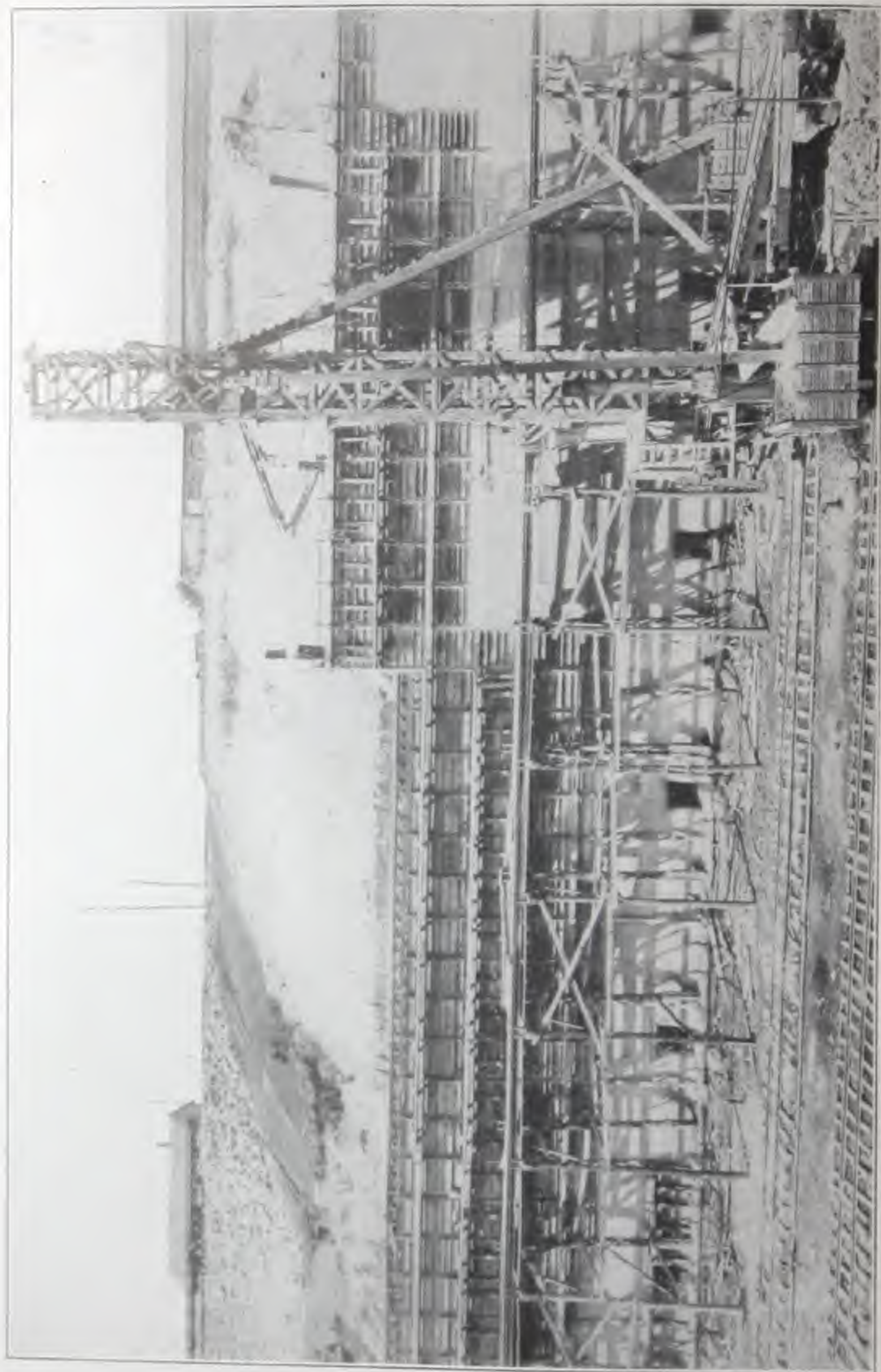
Blaw Heavy Type Wall Forms 15 Feet High, Toledo, Ohio.
Beers & Offutt Construction Company

BLAWFORMS FOR HEAVY WALLS



Blaw Heavy Wall Forms; Filtered Water Reservoir, Baltimore, Md.
C. W. Lane & Company, Contractors

BLAWFORMS FOR HEAVY WALLS



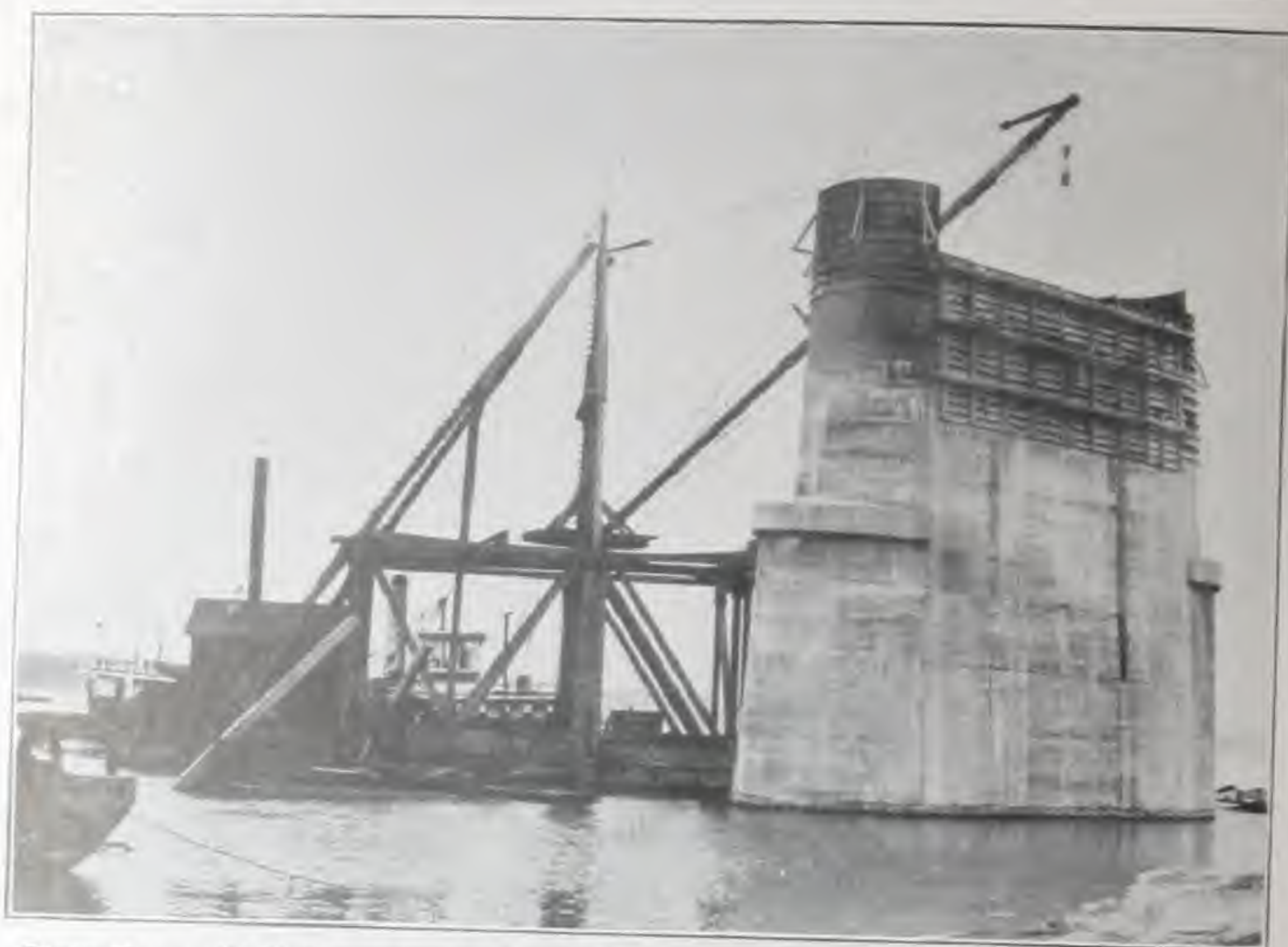
Blaw Heavy Wall Forms, Handled by Hand, Welland Canal Locks. Lane Brothers, Ltd., Contractors

BLAWFORMS FOR HEAVY WALLS



Blaw Heavy Wall Forms on Sides of Pier, and Blaw Special Conical Forms for Ends of Pier, Piqua, Ohio
Pennsylvania Railroad. McKelvy-Hines Company, Contractors

BLAWFORMS FOR HEAVY WALLS

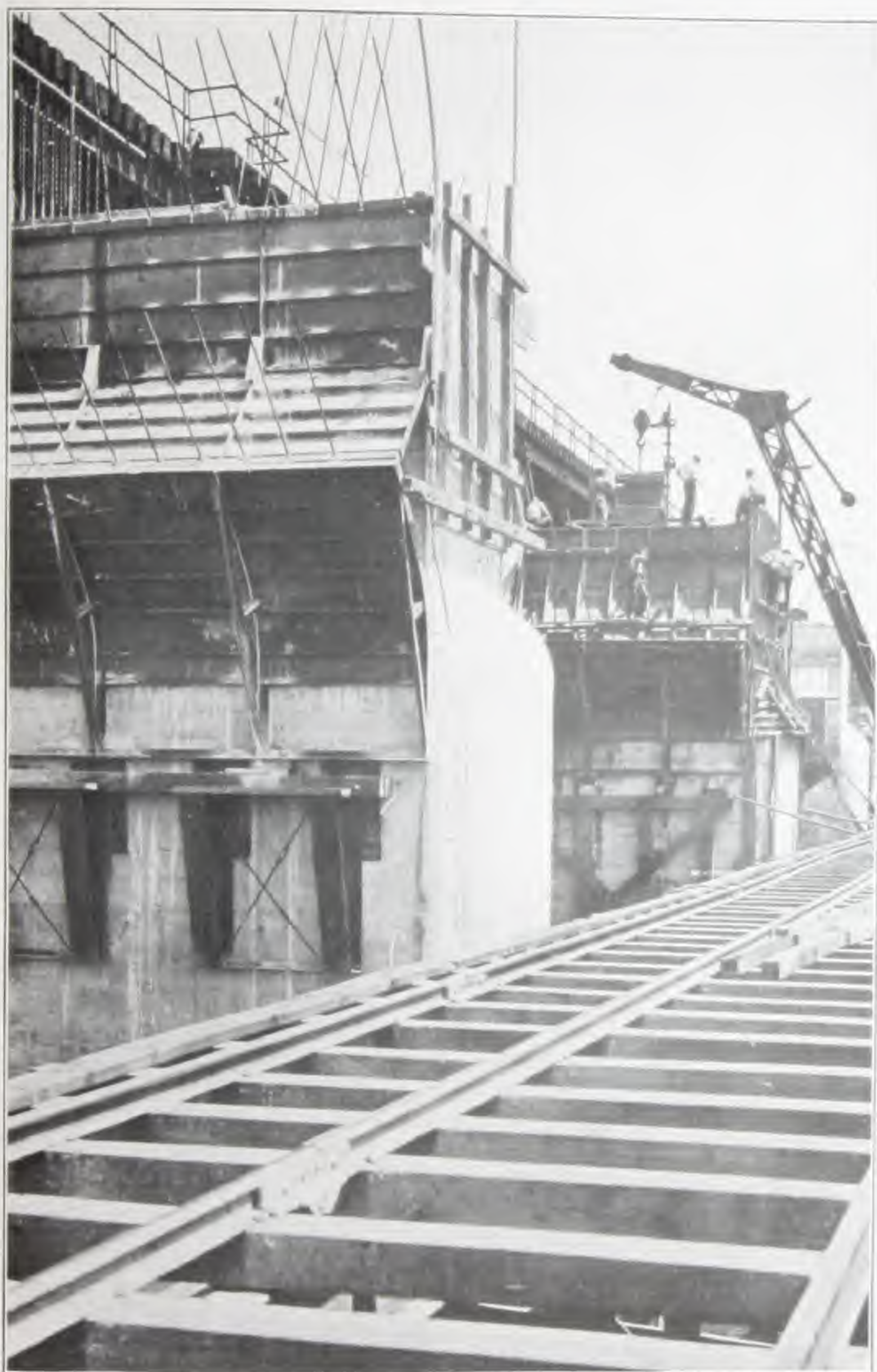


Blaw Heavy Wall Forms on Sides and Special End Forms; Ohio River Bridge
Metropolis, Ill. Chicago, Burlington & Quincy R. R.



Blaw Heavy Wall Forms; Ohio River Bridge, Metropolis, Ill.
Chicago, Burlington & Quincy R. R.

BLAWFORMS FOR HEAVY WALLS

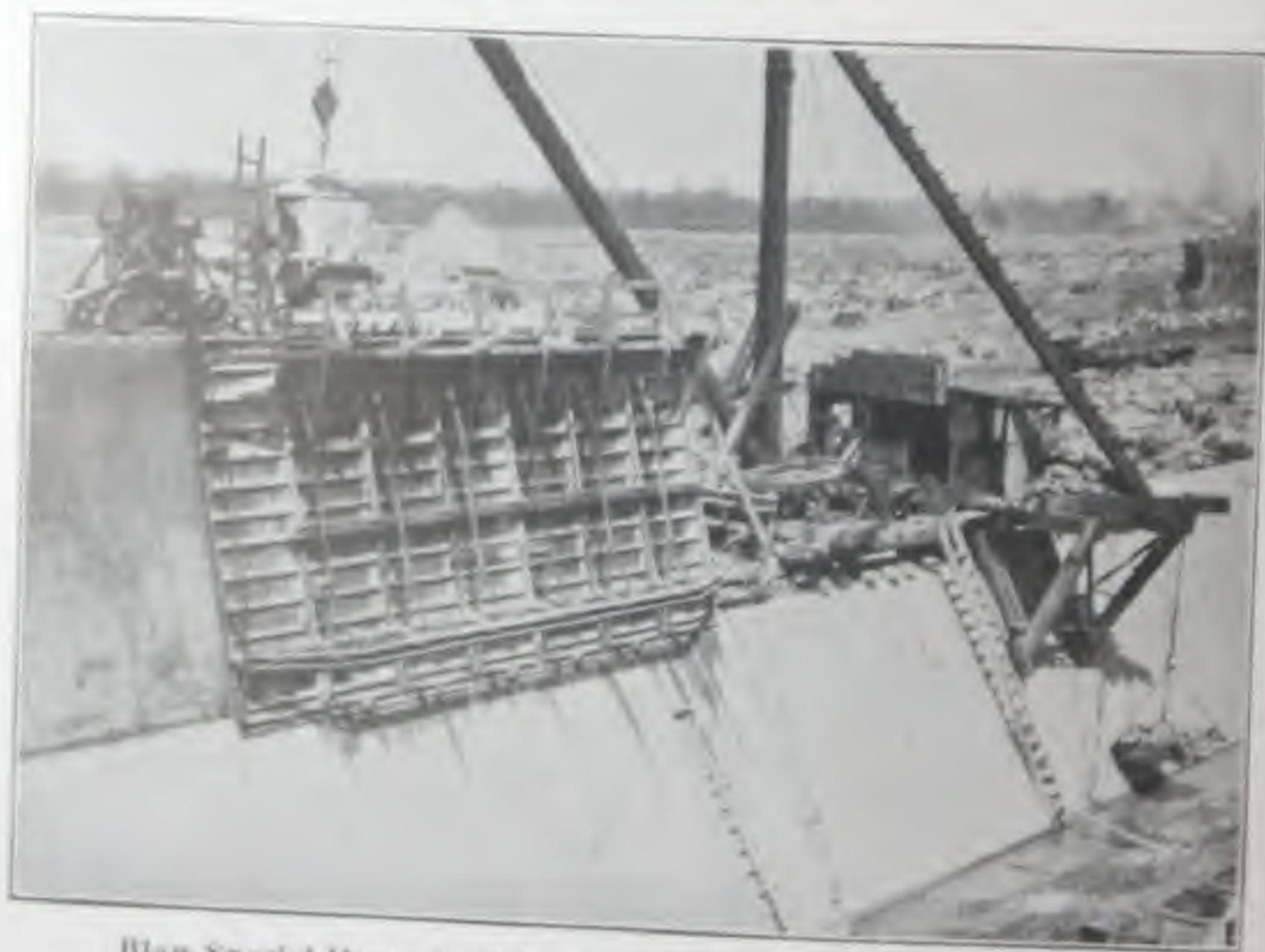


Blaw Special Pier Forms; Susquehanna River Bridge, Harrisburg, Pa.
Robert Grace Contracting Company, Contractors

BLAWFORMS FOR HEAVY WALLS



Blaw Heavy Wall Forms on Piers; Kanawha River Bridge
Charleston, W. Va. D. Minotti, Contractor



Blaw Special Heavy Wall Forms on Hill View Reservoir By-Pass
Catskill Aqueduct

BLAWFORMS FOR HEAVY WALLS



Blaw Standard Lagging Forms, on Hudson River Lock and Dam
Troy, N. Y. United States Army Engineers



Blaw Standard Lagging Forms, on Hudson River Lock and Dam
Troy, N. Y. United States Army Engineers

BLAWFORMS FOR HEAVY WALLS



Blaw Side Arch Subway Forms, Standard Design, New York City Subways
Dégnon Contracting Company, Contractors

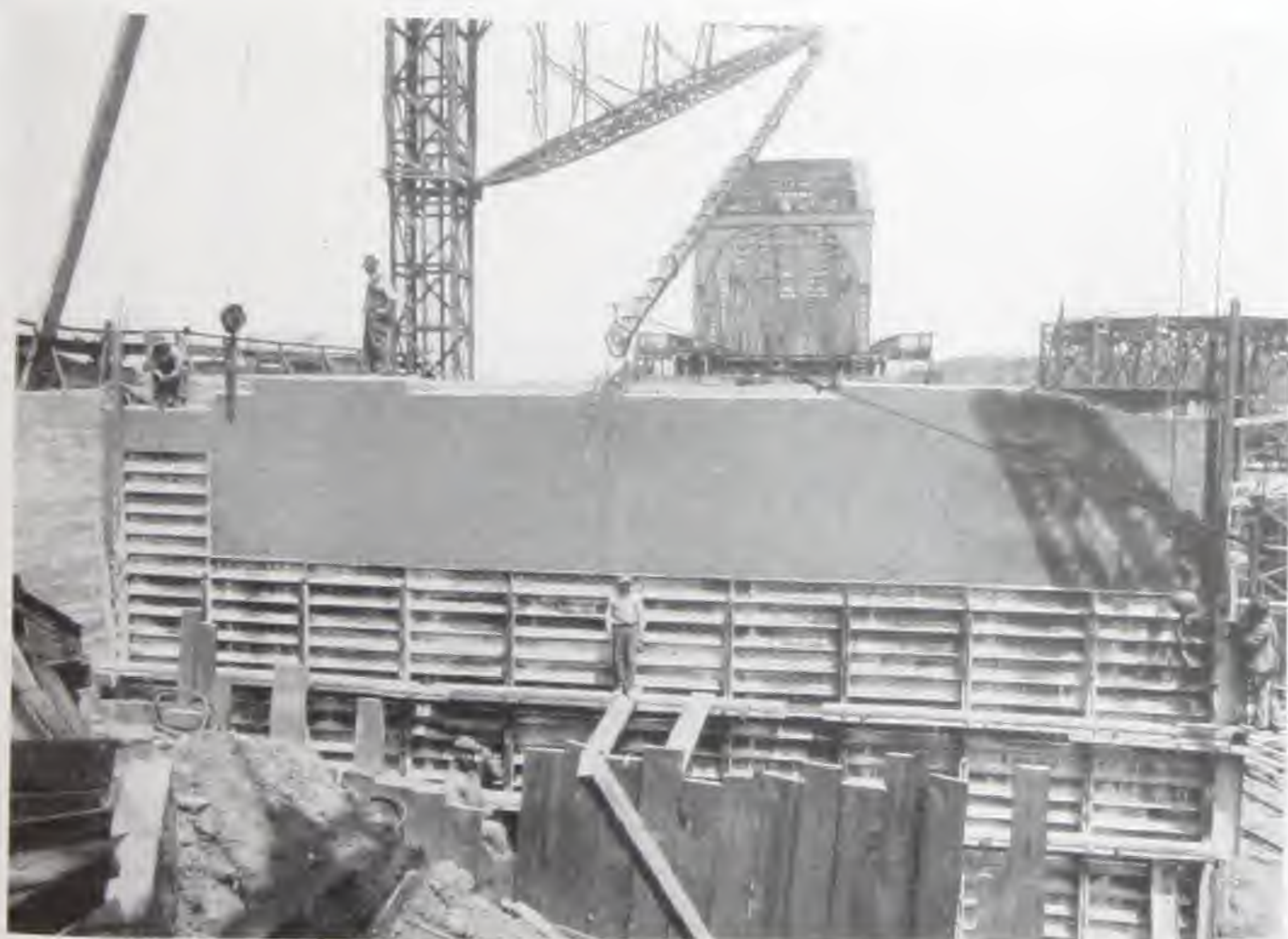


Blaw Center Wall Subway Forms, New York Subways
United States Realty Company, Contractors

BLAWFORMS FOR HEAVY WALLS

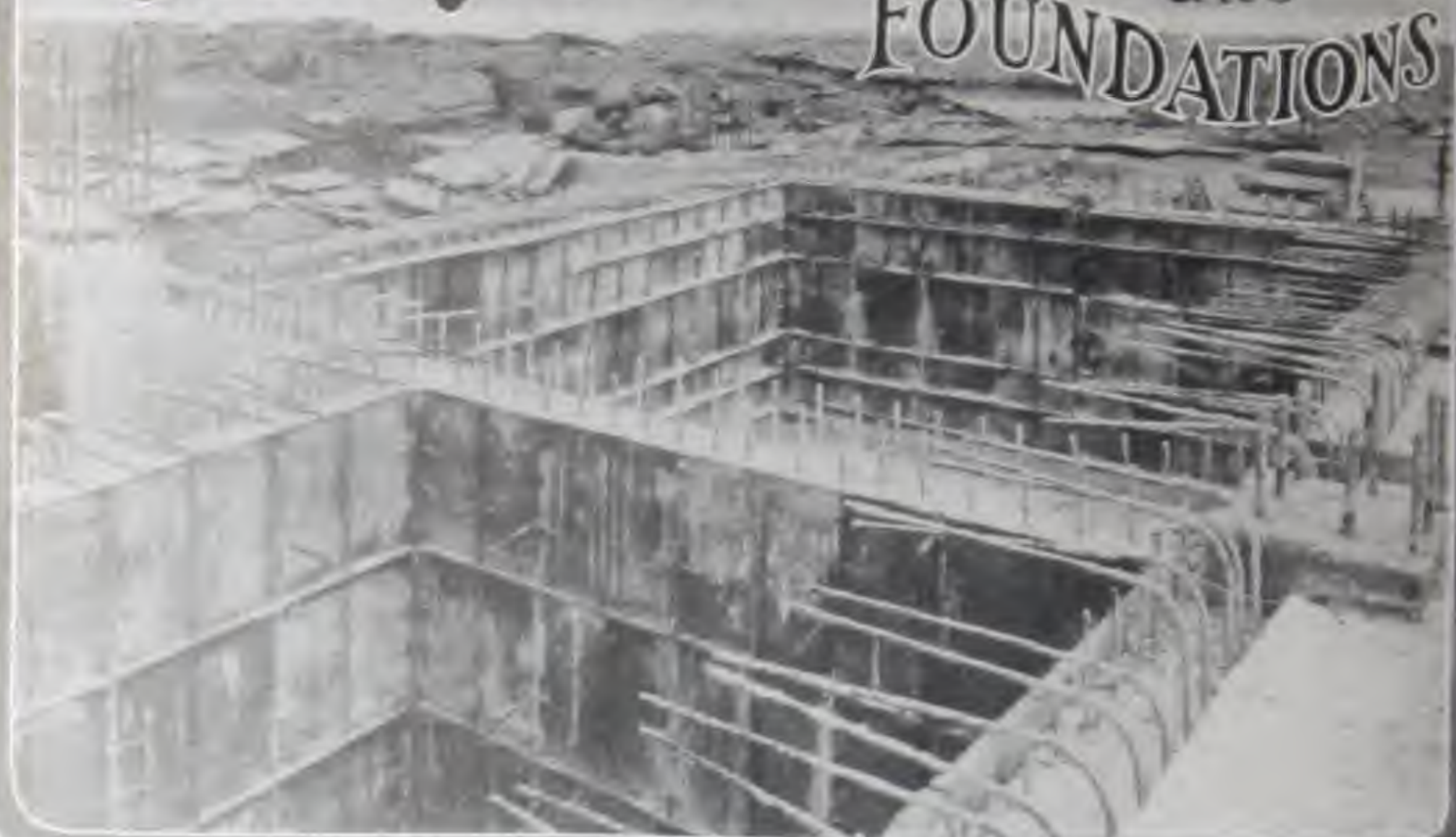


Blaw Combination Lagging Forms on Sides of Box Sewer and Retaining Wall, Grand Rapids, Michigan
Carpenter and Anderson, Contractors



Blaw Combination Lagging Forms on Approaches to Point Bridge
Pittsburgh, Pa. Booth & Flinn Company, Ltd., Contractors

Blawform^Δ for LIGHT WALLS and FOUNDATIONS

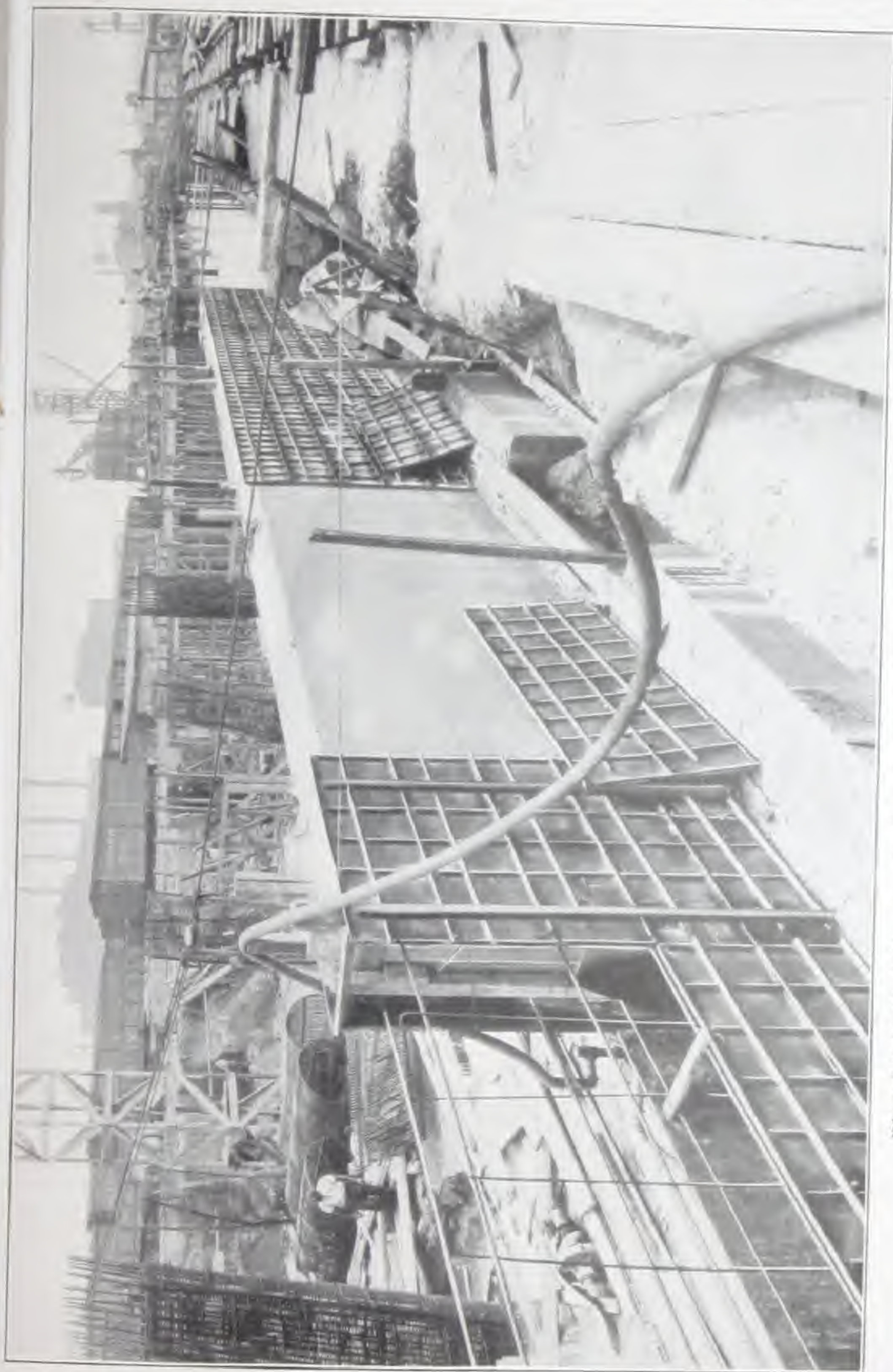


Blaw Light Wall Forms on Foundations at Mill Creek
Naval Station

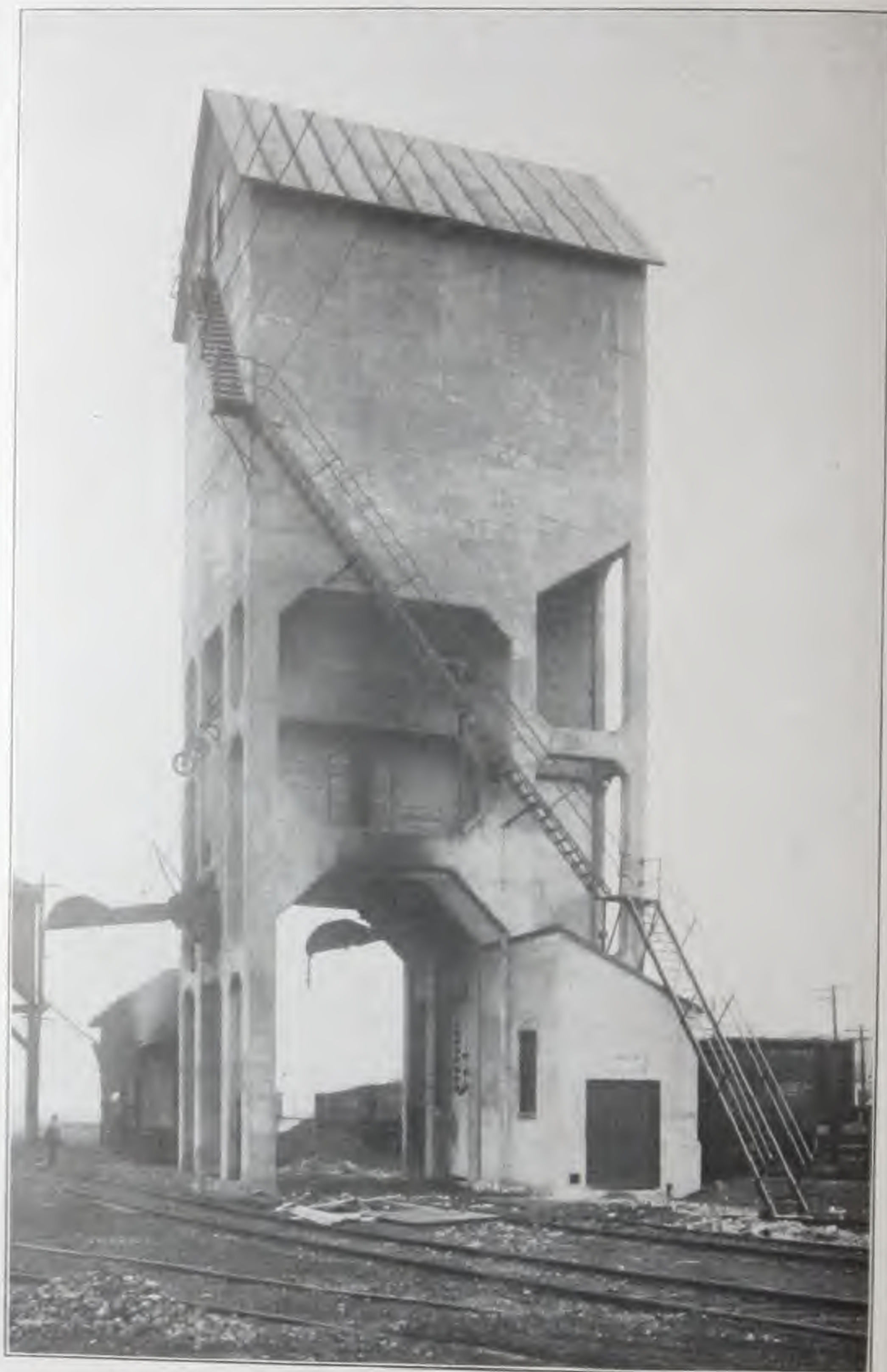
BLAW Light Wall Forms are especially suitable for walls and foundations of Houses, Factories, Warehouses, and other buildings, as well as for Light Retaining Walls, Grain Bins, Coal Tipples, Filtration Plants, and other engineering works. The forms are made of interchangeable plates built entirely of steel, the largest of which is two feet square. They are keyed together rapidly and held in alignment by horizontal and vertical liners, without the use of bolts.

Blaw Light Wall Forms are shifted by hand in units of convenient size, usually 2 feet high and 10 or 12 feet long. The horizontal liners remain attached to the panels during the shifting, but the vertical liners are removed. When the forms are shifted by derrick, traveler or other mechanical means, the vertical liners are left attached and several courses moved as a unit.

BLAWFORMS FOR LIGHT WALLS AND FOUNDATIONS

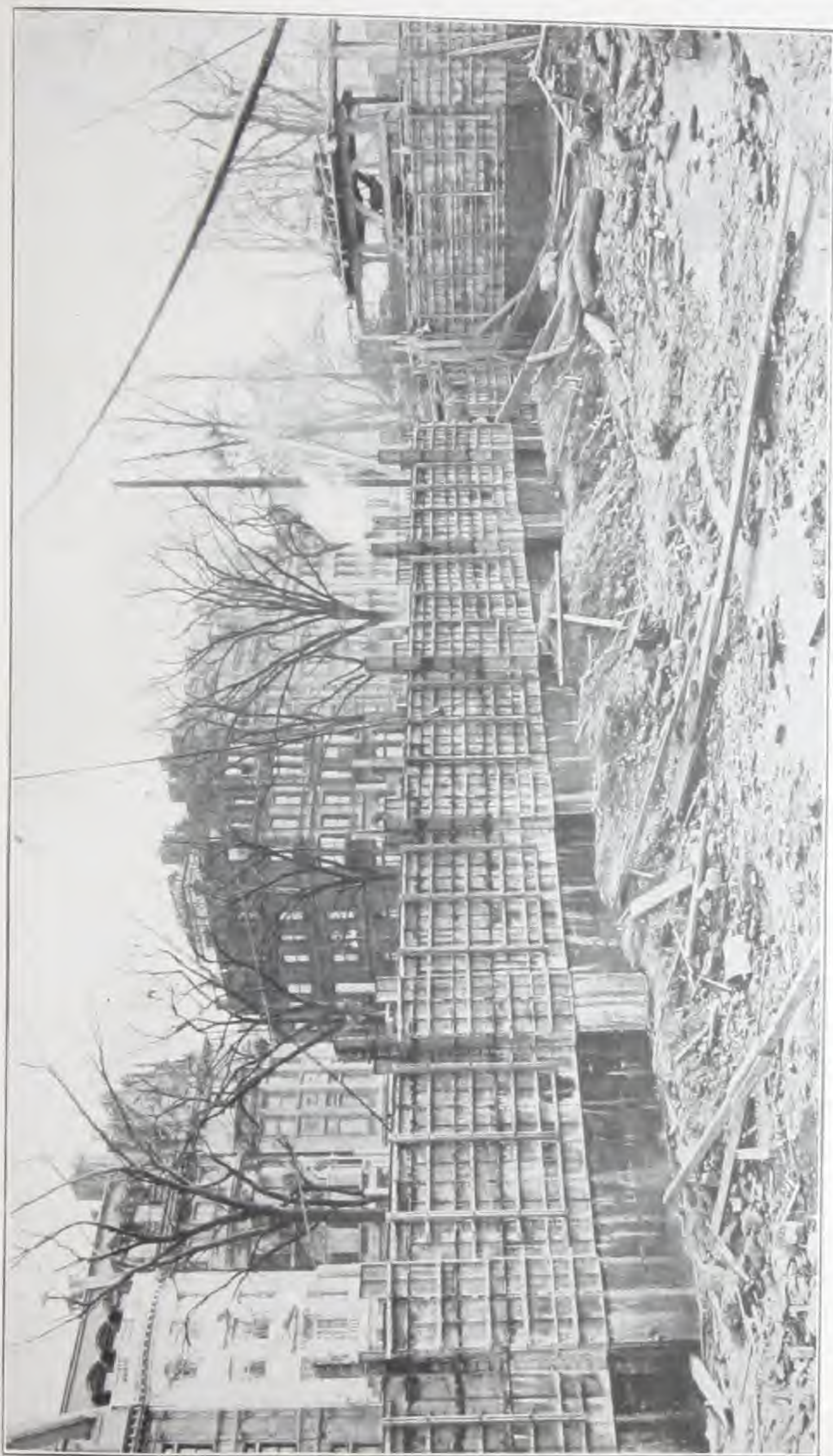


Blaw Light Wall Forms; Freight Station, Pennsylvania Railroad, Philadelphia
Turner Concrete Steel Company, Contractors

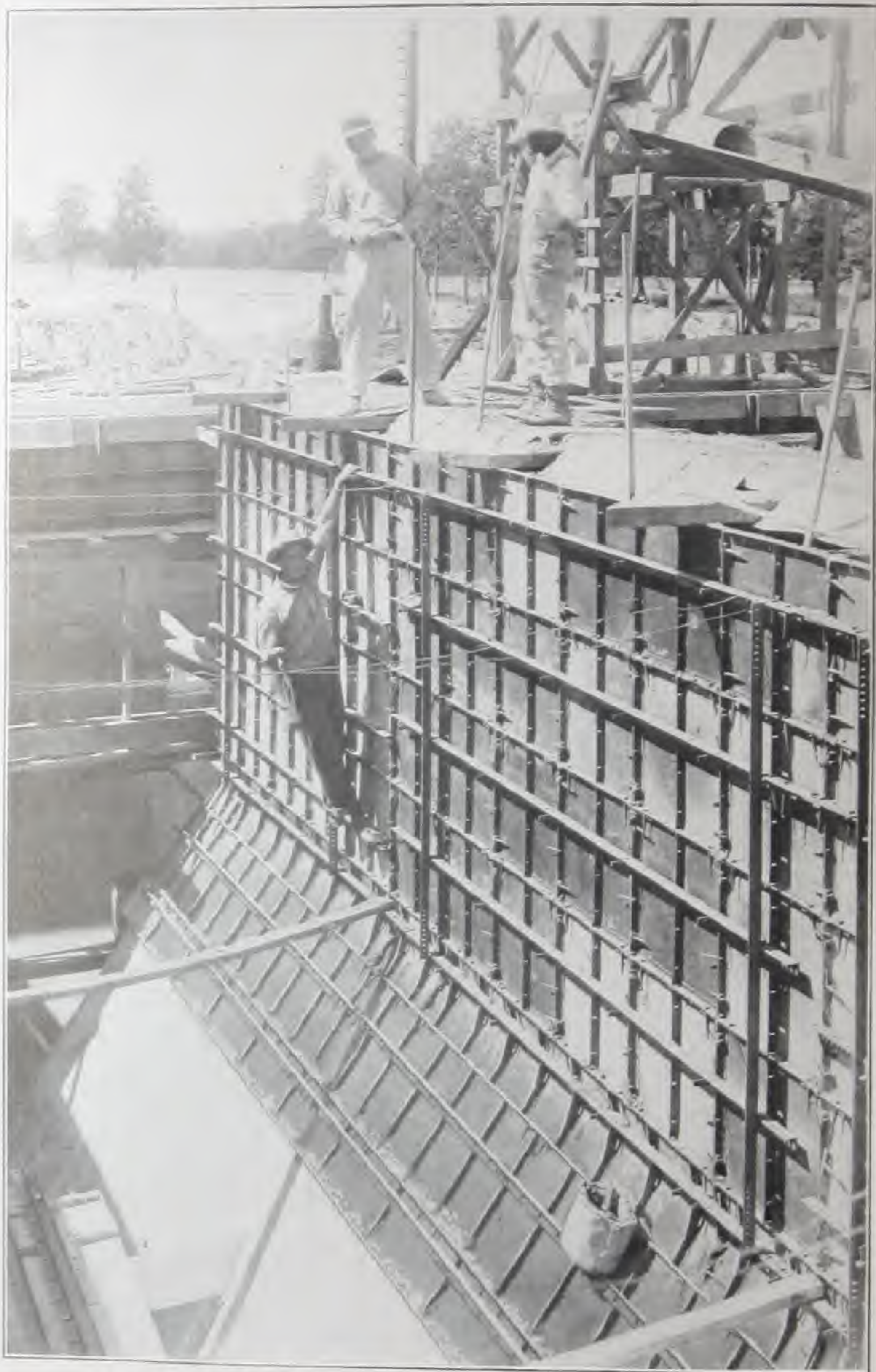


Blaw Light Wall Forms Constructed This Coaling Station
Fairbanks-Morse Company, Designers and Builders

BLAWFORMS FOR LIGHT WALLS AND FOUNDATIONS

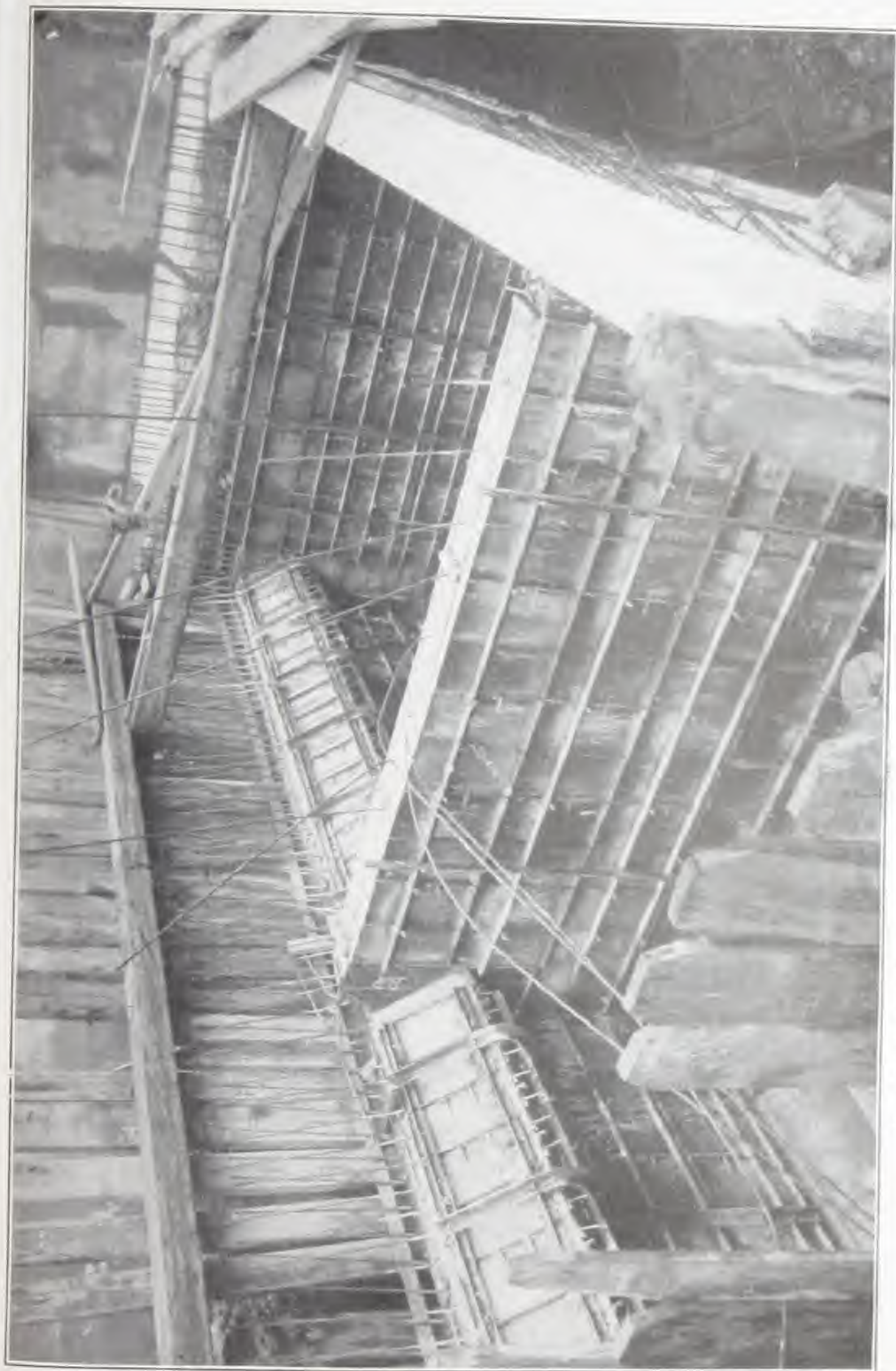


Blaw Light Wall Forms; Foundations for Fine Arts Museum, New York City
P. F. Kenny Company, Contractors



Blaw Light Wall Forms; Sewage Disposal Plant, Dallas, Texas
Bailey-Reeder Company, Contractors

BLAWFORMS FOR LIGHT WALLS AND FOUNDATIONS



Blaw Light Wall Forms; Sewage Disposal Plant, Columbus, Ohio
D. W. McGrath, Contractor

BLAWFORMS FOR LIGHT WALLS AND FOUNDATIONS

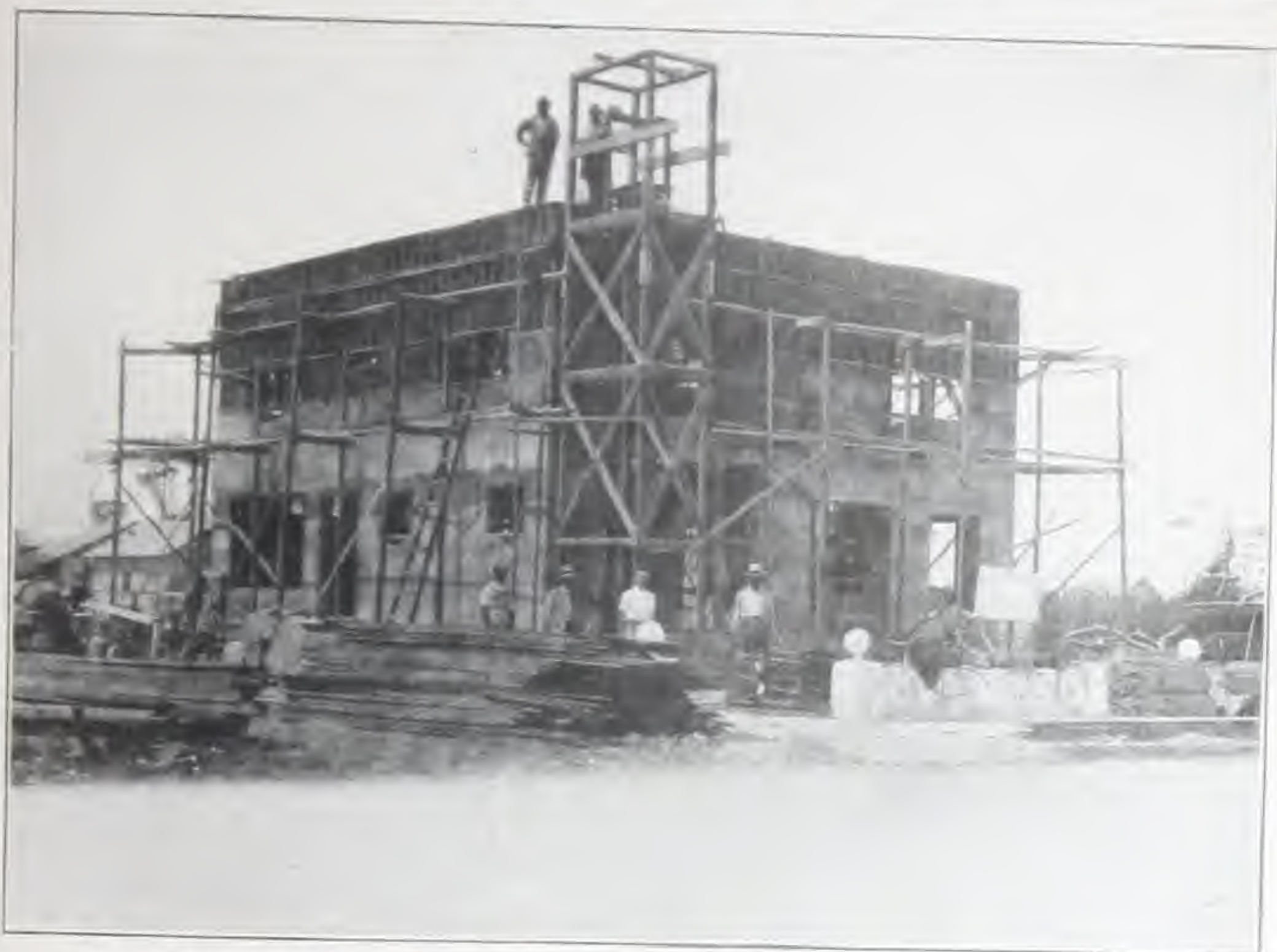


Blaw Light Wall Forms on House Foundations, Hartford, Conn.
H. E. Putnam, Contractor

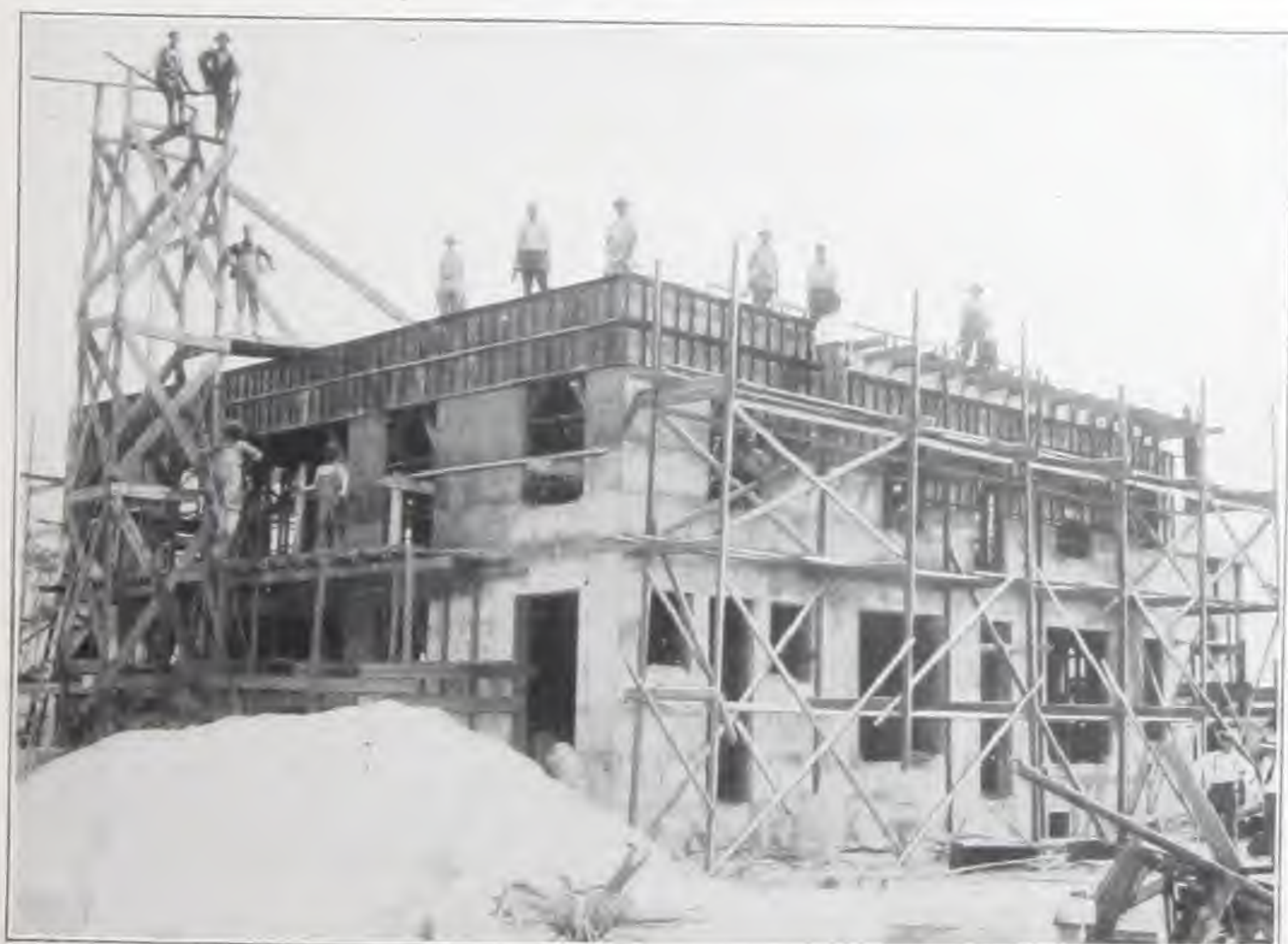


Blaw Light Wall Forms on House Construction, Two-course Method
Used; Springfield, Mass. Howard A. Clapp, Contractor

BLAWFORMS FOR LIGHT WALLS AND FOUNDATIONS



Blaw Light Wall Forms, Three-course Method Used; Miami, Florida
George W. Clark, Contractor



Blaw Light Wall Forms, Two-course Method Used; Miami, Florida
George W. Clark, Contractor

BLAWFORMS FOR LIGHT WALLS AND FOUNDATIONS



Blaw Light Wall Forms Were Used in the Construction of These and Other Buildings in Miami, Florida
George W. Clark, Contractor

BLAWFORMS FOR LIGHT WALLS AND FOUNDATIONS

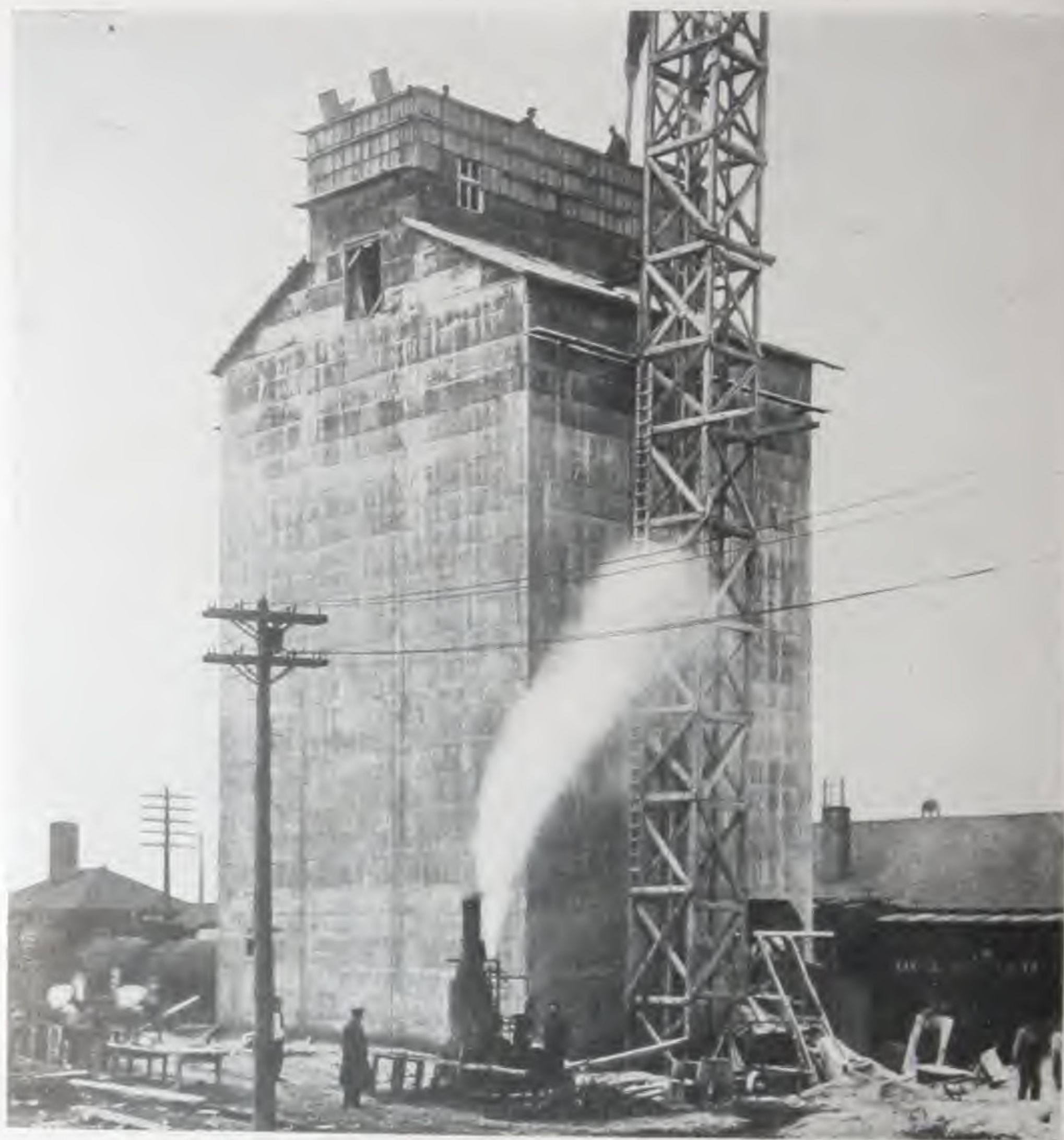


Blaw Light Wall Forms on Retaining Wall 10 Feet High
Hubbard & Company Plant, Pittsburgh, Pa.
Pihl & Miller, Contractors



Blaw Light Wall Forms on Circular Caisson Construction
for Pittsburgh Spring Steel Company
Pihl & Miller, Contractors

BLAWFORMS FOR LIGHT WALLS AND FOUNDATIONS

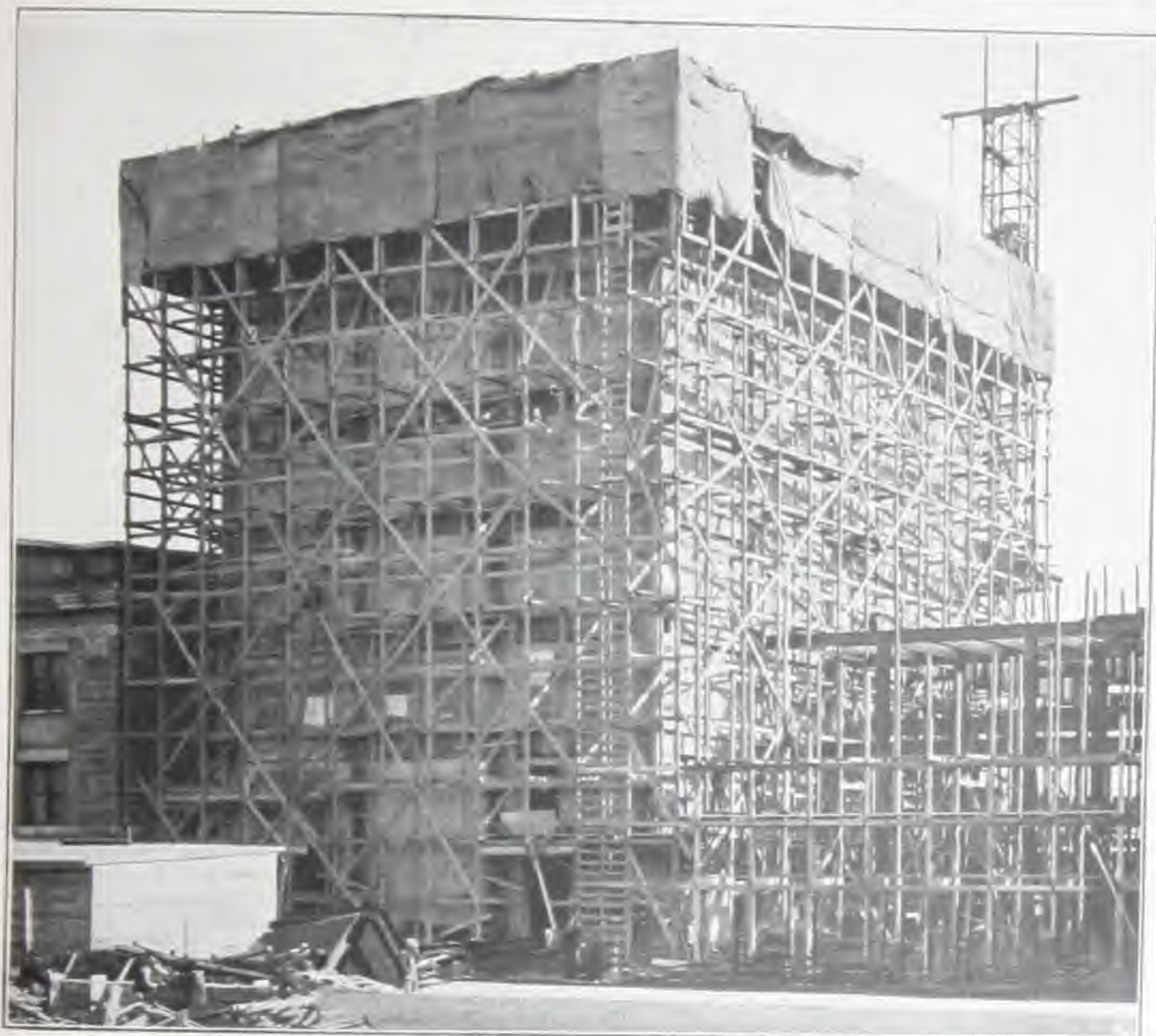


Blaw Light Wall Forms on Square Bin Elevator, Morris, Illinois
Younglove Construction Company, Contractors

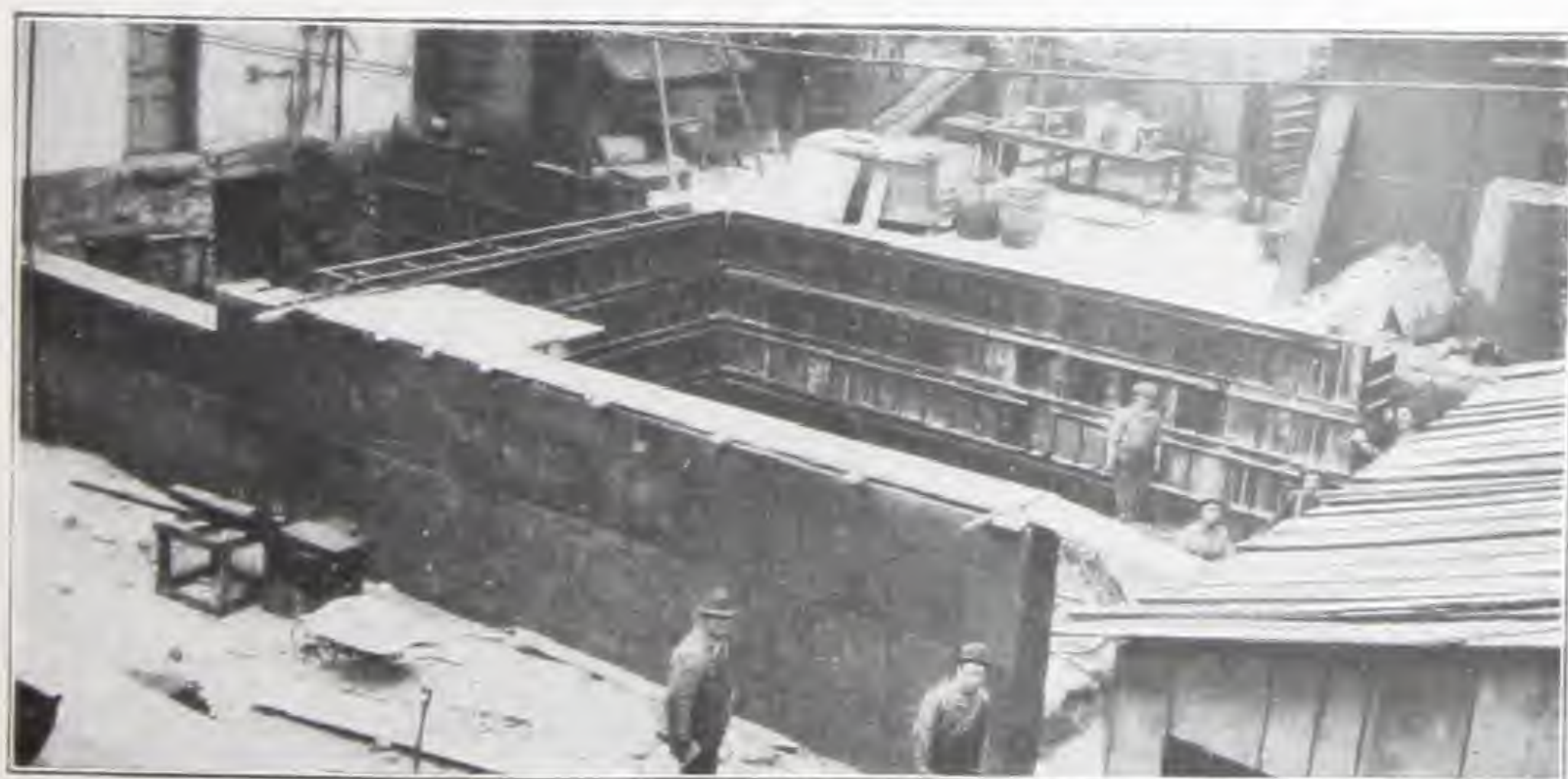


Blaw Light Wall Forms, for Reinforced Concrete Beam Construction on
Casting Platforms (Unit Construction Work), Erie, Pa.
C. H. Diefendorf, Contractor

BLAWFORMS FOR LIGHT WALLS AND FOUNDATIONS

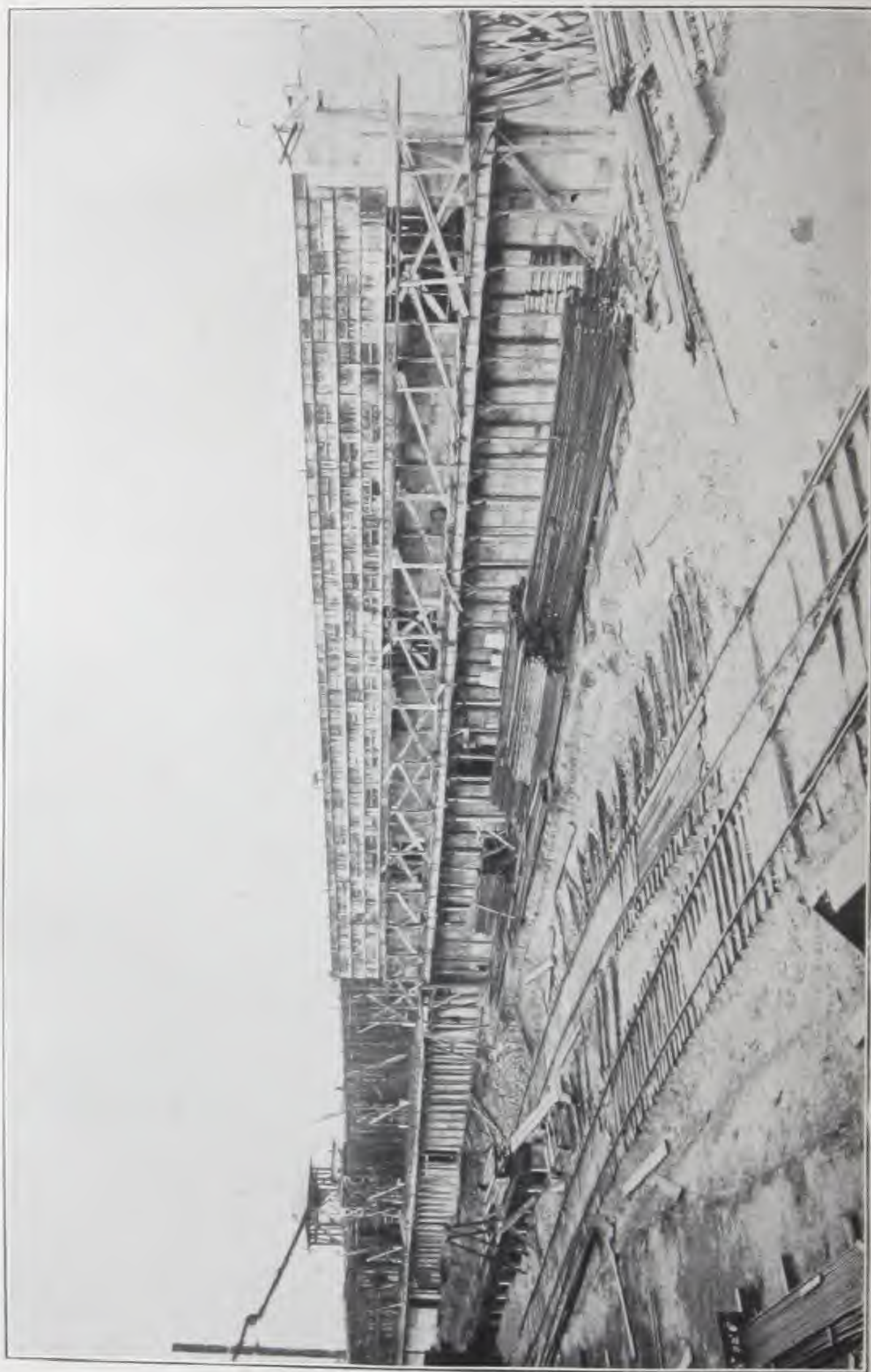


Blaw Light Wall Forms on Commonwealth Ice & Cold Storage Company Building, South Boston, Mass. Aberthaw Construction Company, Contractors



Blaw Light Wall Forms on Foundation Work, Coshocton, Ohio
George M. Bock & Son, Contractors

BLAWFORMS FOR LIGHT WALLS AND FOUNDATIONS



Blaw Light Wall Forms on Merchants Compress Warehouse, Houston, Texas
James Stewart & Company, Contractors

BLAWFORMS FOR LIGHT WALLS AND FOUNDATIONS



Blaw Light Wall Forms on Merchants and Planters Compress and Warehouse Company's Plant, Galveston, Texas. Gilsonite Construction Company, Contractors



Blaw Light Wall Forms on Ore Dock for Duluth, Missabe and Northern Ry., Duluth, Minn. Bates & Rogers Construction Company, Contractors



Interior of Colgate Building, Jersey City, N. J. Blaw Column
Molds Used. Turner Construction Co., Contractors

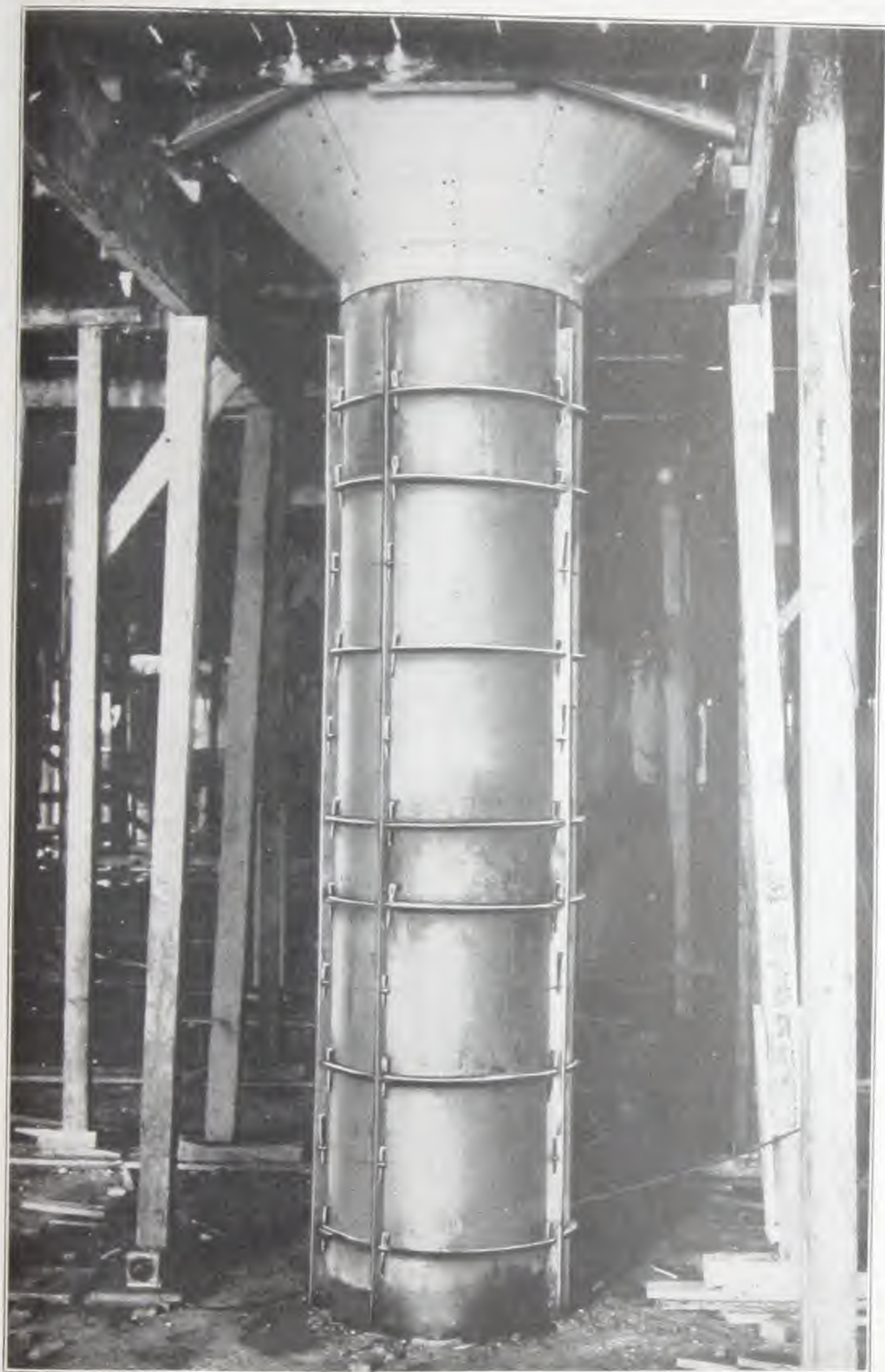
BLAW Adjustable Column Molds are made up of flexible sheet metal panels, flanged, with rigid sectional bands passing through the flanges and secured by wedges. When assembled, the mold is absolutely stiff and rigid. They are adjustable as to height and diameter, therefore a small equipment can be used on a wide range of work.

Because of its lightness, the mold is easily handled and cheaply transported. The panels nest during shipment and take up very little room when not in use. The forms, when received, are complete, ready for use. No cutting or fitting or punching of holes is required. All parts are standard and interchangeable. No time need be wasted keeping the molds together in sets. No skilled labor is required.

Blaw Column Head Molds are of three standard types, Conical Head, Bell Head and Bell Head with Molded Top. They are carried in stock and are recommended wherever the best construction is desired at the lowest cost.

We lease Blaw Column Molds and Heads on very reasonable terms. We also furnish all types of Steel Column Guards.

BLAWFORMS FOR COLUMNS



Blaw Standard Column Mold, with Plain Conical Head

BLAWFORMS FOR COLUMNS



Blaw Column Molds Used in Constructing McGuire Building
Roanoke, Va. J. F. Barbour & Sons, Contractors



Blaw Column Molds Used in Forming Columns, McCormick Plant
International Harvester Company, Chicago, Ill.

BLAWFORMS FOR COLUMNS



Blaw Column Molds Used in Forming Columns Built by
Reaugh Construction Company, Cleveland, Ohio



Blaw Column Molds Used in Forming Columns in Omaha Cold Storage
Company's Plant, Omaha, Nebraska. John H. Harte, Contractor

BLAWFORMS FOR COLUMNS



Blaw Column Molds Used in Forming Columns in National Casket Company Building, Long Island City, N. Y. Fred T. Ley, Contractor



Blaw Column Molds Used on Factory for Naumkeag Steam Cotton Company's Plant, Salem, Mass. Fred T. Ley, Contractor

BLAWFORMS FOR COLUMNS



Blaw Octagonal Column Forms Used in Lippincott Building
Cincinnati, Ohio. Ferro-Concrete Construction Company
Contractors



Blaw Column Forms Used in Delco Building, Dayton, Ohio
A. Bentley & Sons, Contractors

BLAWFORMS FOR COLUMNS

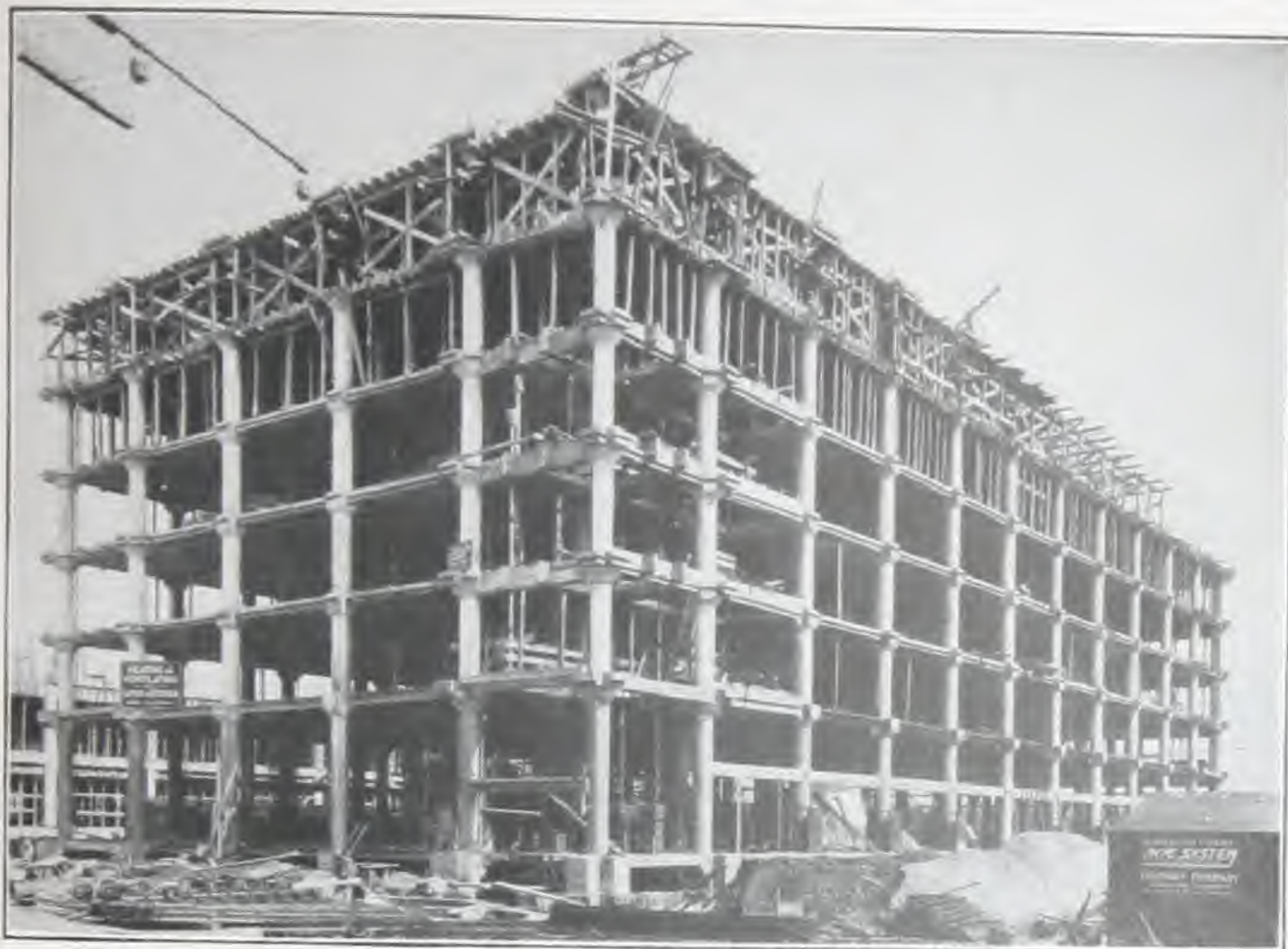


Blaw Column Forms Used in Magnolia Paper Company's
Factory and Warehouse, Houston, Texas
James Stewart & Company, Contractors



Blaw Column Molds Used to Fireproof Columns, Astoria Light
Heat and Power Company Building, Astoria, Long Island

BLAWFORMS FOR COLUMNS



Blaw Column Molds in Use on Sears-Roebuck Building, Kansas City, Mo. Swenson Construction Company, Contractors



Blaw Column Molds Were Used in Construction of This Building for Worcester Woolen Mills Company, Worcester, Mass.
E. J. Cross Company, Contractors

Blaw Arch Ribs



Blaw Arch Ribs on Larz Anderson Bridge, Cambridge and Boston Mass. Holbrook Cabot Rollins Corporation, Contractors

BLAW Arch Ribs are designed for the support of the Arches of Reinforced Concrete Bridges during construction. Where the space beneath the arches is occupied by railroad tracks, or is the bed of a stream, subject to flood conditions and cannot be used for the support of falsework, Blaw Arch Ribs are an ideal form of support. Even when the space beneath the arch can be used for falsework, the cost of such falsework, when compared with Blaw Arch Ribs, has been found in a great many cases to be excessive.

Blaw Arch Ribs are designed with proper consideration of the great weight of the arches to be carried and economy in erecting and moving. They relieve the contractor of hazard and expense of designing supports for such work, and maintain an open passageway beneath the structure.

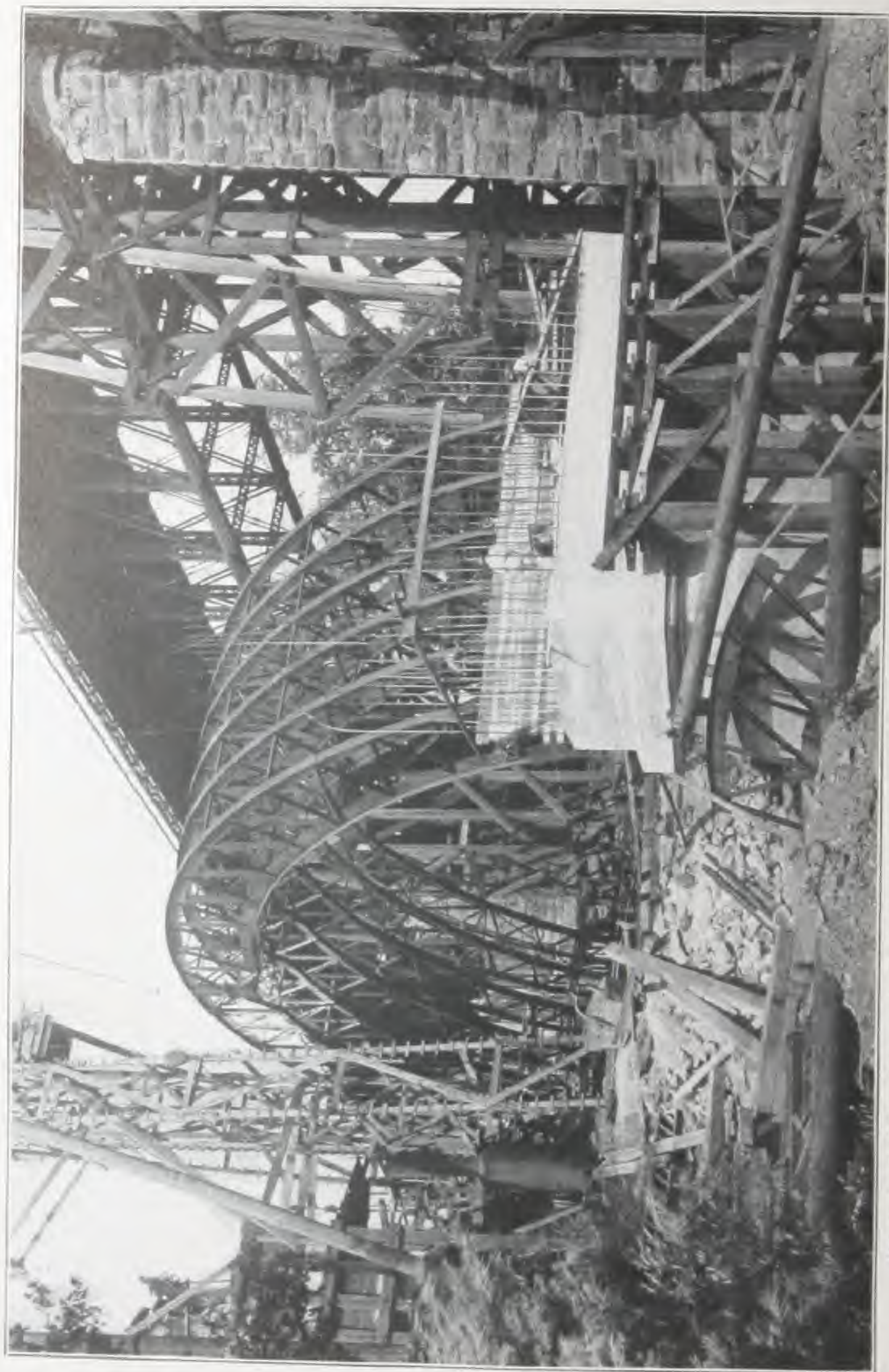
Blaw Arch Ribs are furnished only after a very careful study of the structure to be built, local conditions and the plant which is to handle the erection.

BLAW ARCH RIBS



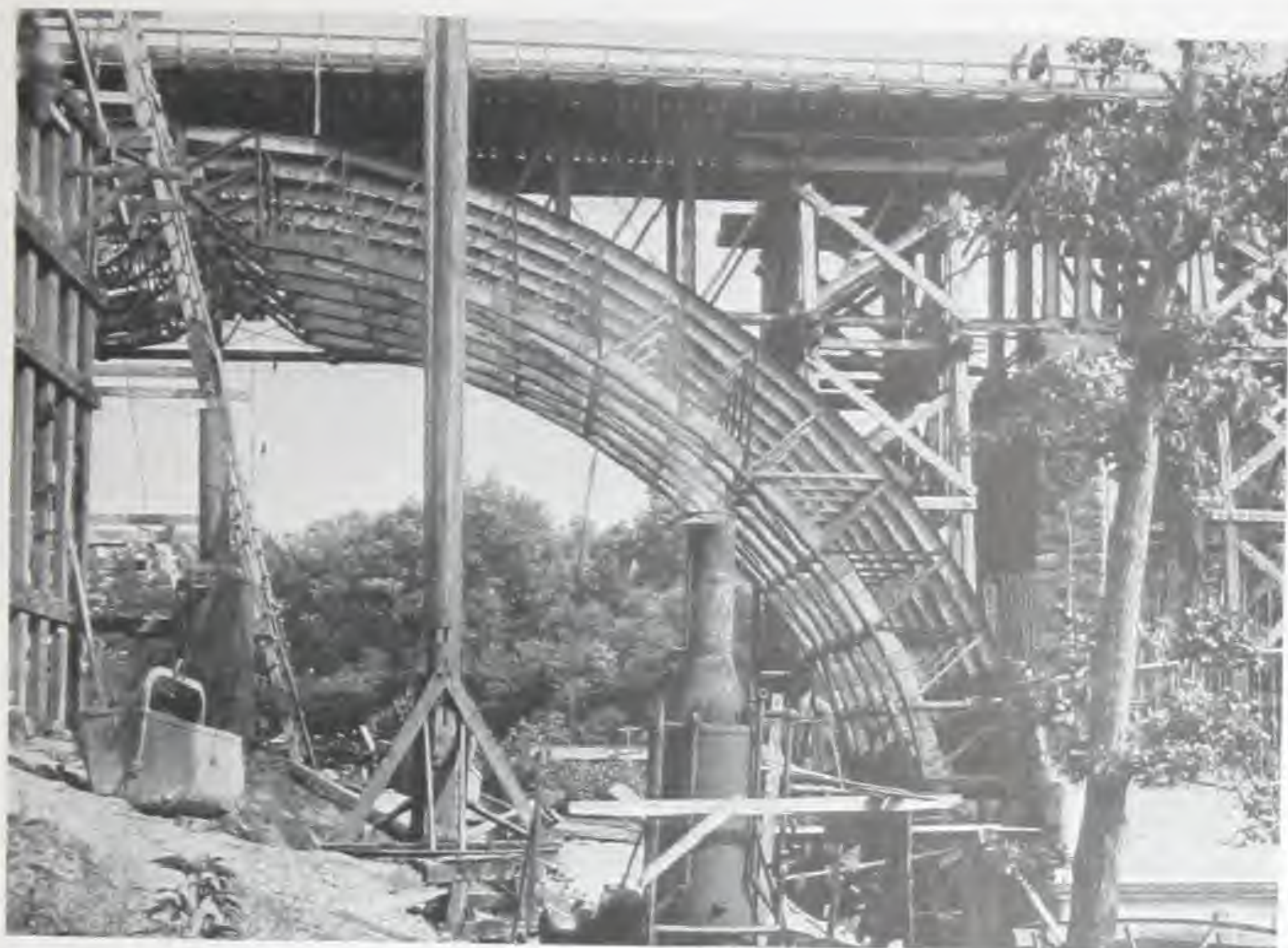
Blaw Arch Ribs, Bridge over Susquehanna River for Cumberland Valley Railway Company, Harrisburg, Pa.
Robert Grace Contracting Company, Contractors. This Bridge Consists of 44 Spans
74 Feet 6 Inches and 77 Feet between Piers. Same Centers Used on All Spans

BLAW ARCH RIBS



Blaw Arch Ribs, Gwynn's Falls Bridge, Pennsylvania Railroad. Special Lagging Spandrel Wall Forms Spandrel Arch Forms Were Also Used on This Bridge. Charles McDermott Company, Contractors

BLAW ARCH RIBS



Blaw Arch Ribs, 115-foot Span in Place, Gwynn's Fall Bridges
Pennsylvania Railroad. Charles McDermott Co., Contractors

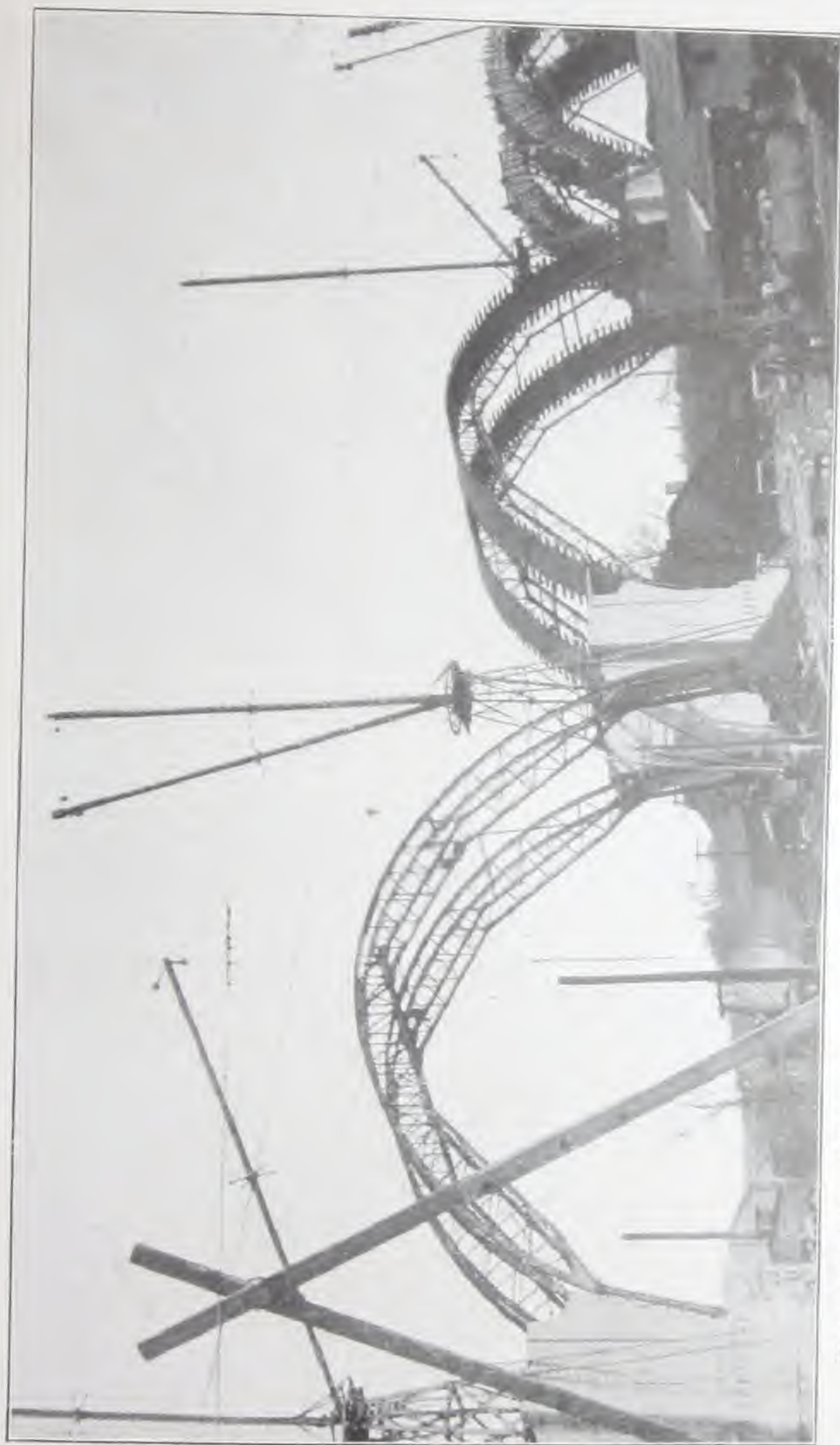


Blaw Arch Ribs, 115-foot Span in Course of Erection, Gwynn's Falls Bridge
Pennsylvania Railroad. Charles McDermott Company, Contractors

BLAW ARCH RIBS



Blaw Arch Ribs on Hopple Street Viaduct, Cincinnati, Ohio
Kirchner Construction Company, Cincinnati, Ohio



Blaw Arch Ribs, 120-foot Span, Eighth Street Viaduct, Allentown, Pa. MacArthur Brothers and Cullen-Freistedt Company, Contractors; Showing Method of Erecting Arch Ribs; also Method of Placing Lagging and Wood Forms for the Concrete Arch

BLAW ARCH RIBS



Blaw Arch Ribs on Pennsylvania Railroad Bridge at Frick's Lock, Pa.
84-foot Span. James McGraw Company, Contractors



Blaw Arch Ribs, 32-foot Span; Long Island Railroad, New York City
Note Method of Moving the Ribs with Lagging in Place as a Unit

BLAW ARCH RIBS



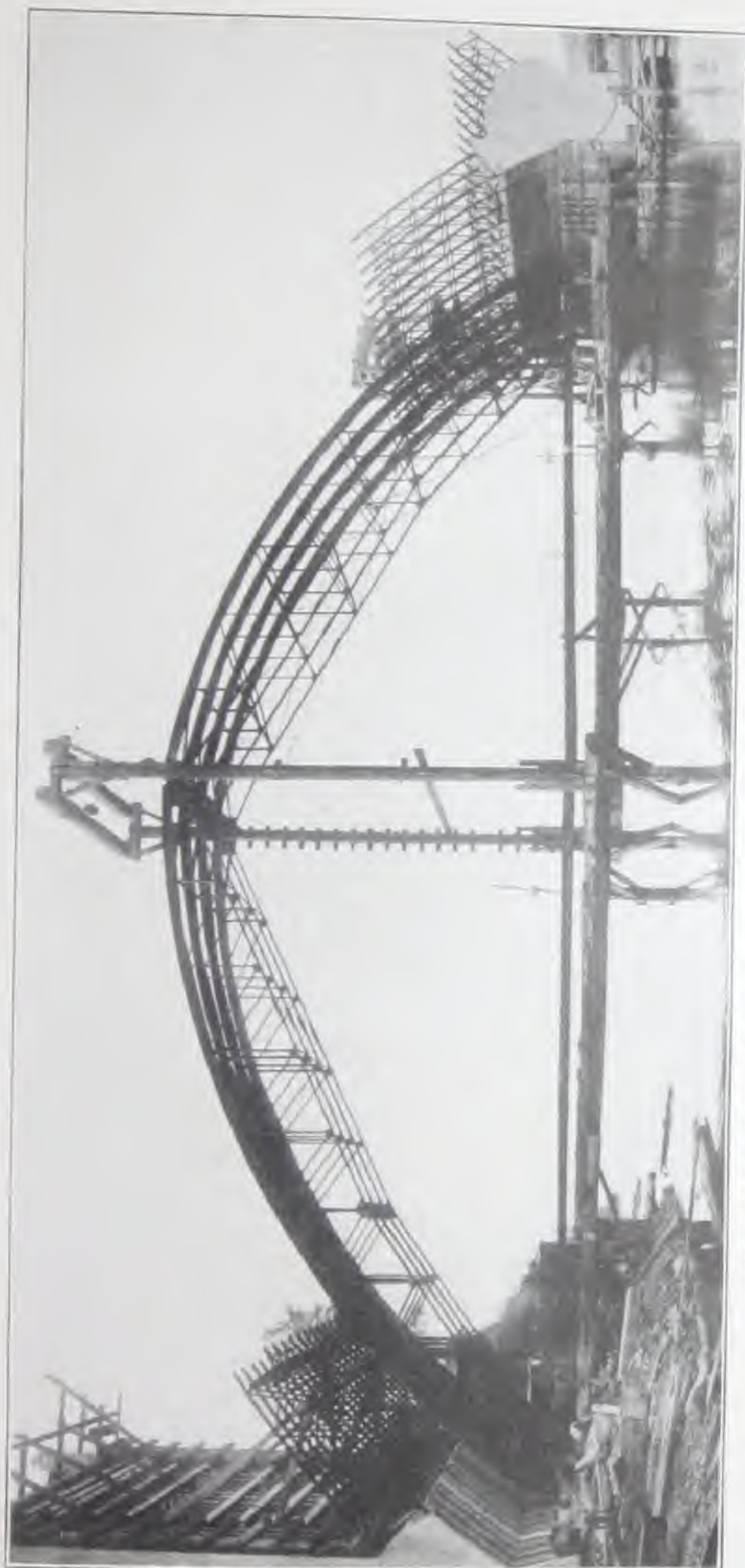
Blow Arch Ribs on Ashokan Dam, Catskill Aqueduct. Transit Construction Company, Contractors

BLAW ARCH RIBS



Blaw Arch Ribs, 41-foot Span, Corliss Street Tunnel, Pittsburgh, Pa. M. O'Herron & Company, Contractors

BLAW ARCH RIBS



Blaw Arch Ribs, Minnetto, N. Y., Bridge. Larkin & Sangster, Contractors



Blaw Integral Base and Curb, and Curb and Gutter, on
Allegheny County, Pa., Road Construction
T. A. Gillespie Company, Contractors

THE time, labor and money you waste with wood forms on a fair-sized job, would purchase an outfit of Blaw Steel Forms which would not only take care of that job, but, being practically indestructible, would last you a lifetime.

One outfit of Blaw Universal Side Rails can be used on Sidewalk, Curb, Curb and Gutter, Integral Base and Curb Construction and Concrete Roads of every type. They are set up in about one-tenth the time with one-tenth the labor required for wood forms. Steel Division Plates insure correct expansion joints and uniform width and cross section throughout.

It may be possible to obtain other forms at a lower first cost than Blawforms. In the long run, Blaw Steel Forms, because of their strength, durability and ease of handling, cost less.

BLAWFORMS FOR ROADS, SIDEWALKS AND GUTTERS



Blaw Sidewalk Forms Used by Jamison & Hollowell, Atlanta, Ga.



Blaw Curb and Gutter Forms. Note Perfect Alignment and Rigidity with Steel Stakes



Blaw Concrete Road Forms on Ohio National Pike
H. E. Culbertson, Cleveland, Ohio, Contractor

BLAWFORMS FOR ROADS, SIDEWALKS, AND GUTTERS



Blaw Universal Curb Forms on Integral Base and Curb Construction
Tarrytown Road, N. Y. Malloy & Murray, Contractors



Blaw Curb Forms 24-inches High, Built up of One 12-inch and Two 6-inch
Universal Rails. Brown & Young, Troy, Ohio, Contractors

Blawforms Miscellaneous Construction

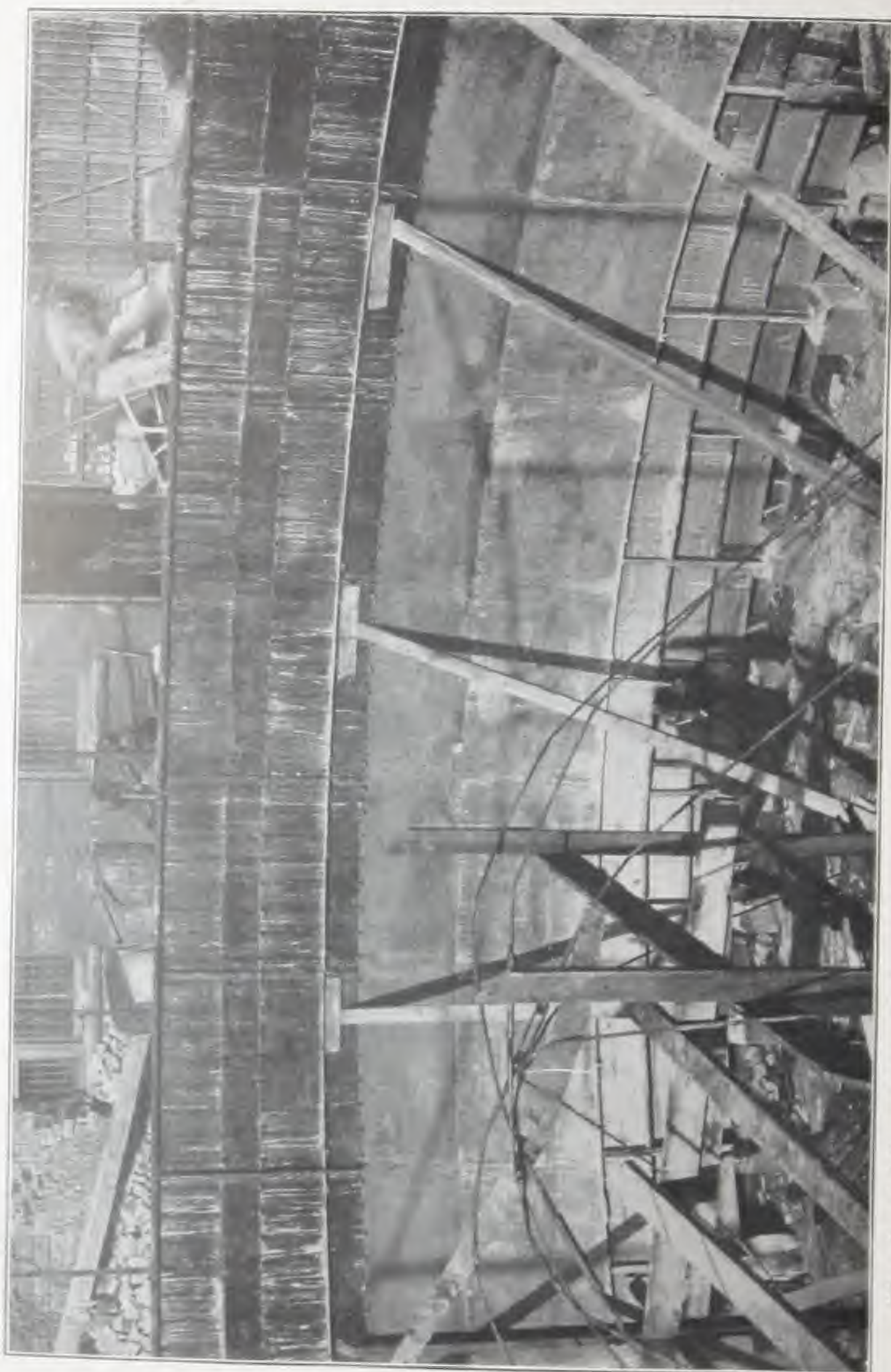


Blaw Steel Forms on Harding Pike Viaduct, Nashville, Tenn.
Meacham Contracting Co., Contractors

LACK of space prohibits us from giving special treatment to a great many kinds of concrete work on which Blawforms were used with great success, but which do not fall naturally under any of the heads in the foregoing pages.

A few illustrations of such miscellaneous concrete construction follow. Every example given was the object of special study on the part of our Engineering Department before we determined which method would save the most money.

In a number of cases standard steel forms were used, in others, standard forms supplemented by special parts were used to better advantage, while many jobs required special forms designed especially for that job. Wherever the work can be laid out to permit repeated use of the forms, steel forms are more economical than wood.



Blaw Special Forms Used for Sinking Concrete Pit 42 Feet in Diameter for the Peoria Water Works Company
Peoria, Illinois. Dabney H. Maury, Chicago, Consulting Engineer

BLAWFORMS FOR MISCELLANEOUS CONSTRUCTION

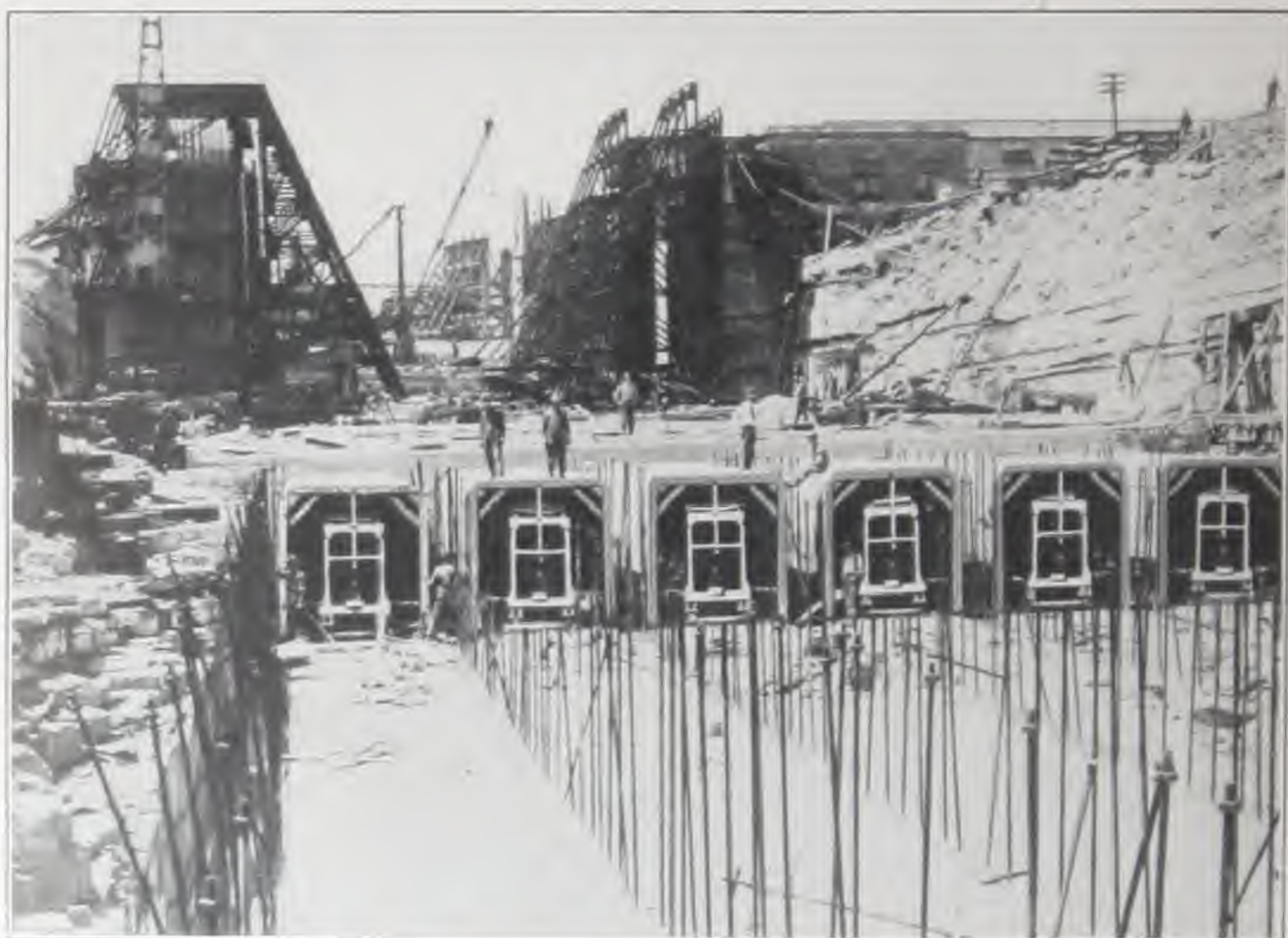


Blaw Steel Forms on Harding Pike Viaduct, Nashville, Tenn.
Viaduct is 610 Feet Long with a Total of 23 Spans
Meacham Contracting Company, Contractors



Blaw Special Forms on Rochester Sewage Plant, Rochester, N. Y.
Myers & McWilliams, Lancaster, Pa., Contractors

BLAWFORMS FOR MISCELLANEOUS CONSTRUCTION



Blaw Culvert Forms on Sault Ste. Marie Canal
Oscar Daniels Co., New York, Contractors



Blaw Special Forms for Concrete Block Construction; Halifax
Stewart & Fauquier

BLAWFORMS FOR MISCELLANEOUS CONSTRUCTION

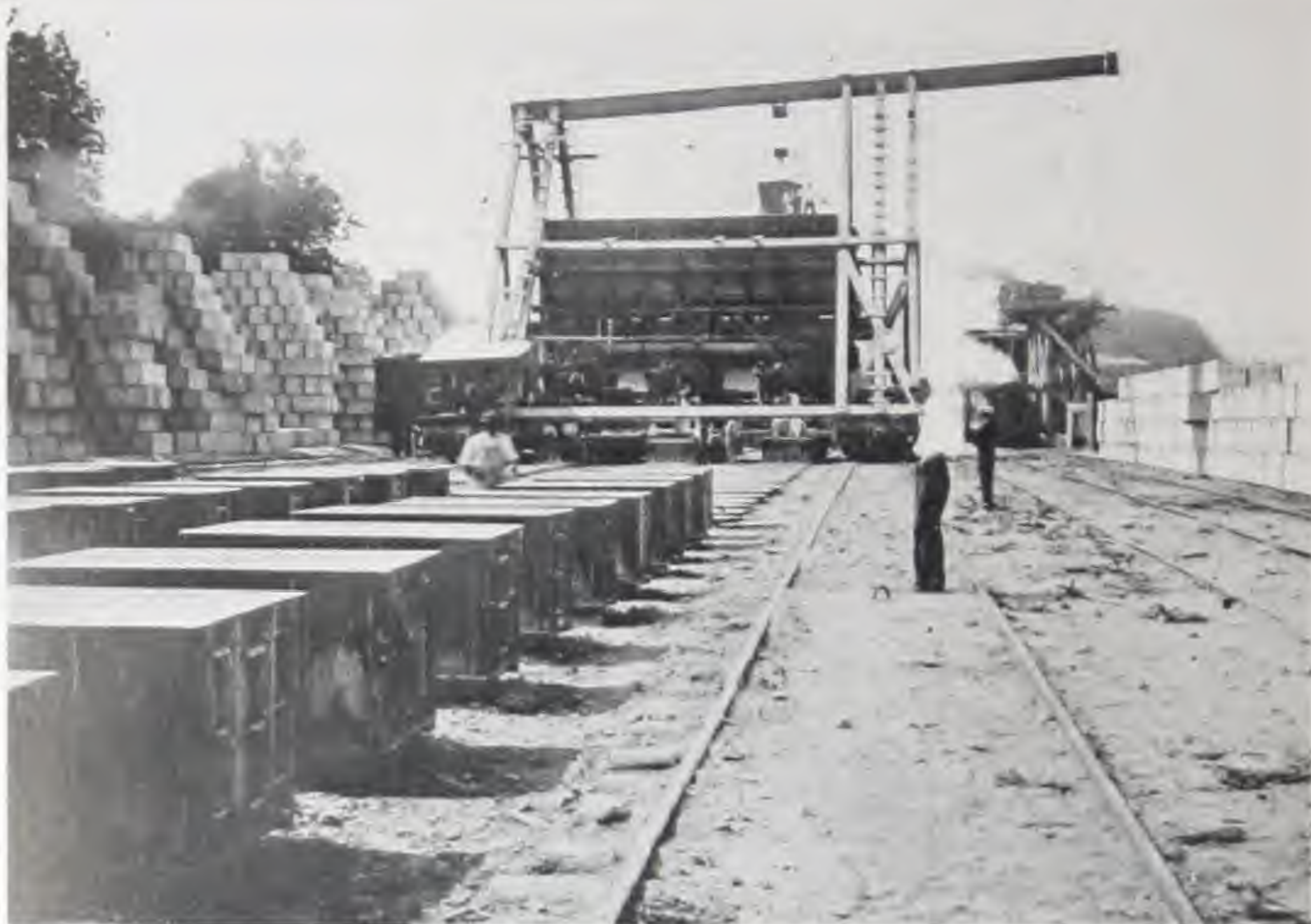


Blaw Special Forms on Pier at Savannah, Georgia. Phoenix Construction Company, New York City, Contractors



Ocean Terminals, Halifax, Canada. Foley Brothers, Welch, Contractors

BLAWFORMS FOR MISCELLANEOUS CONSTRUCTION

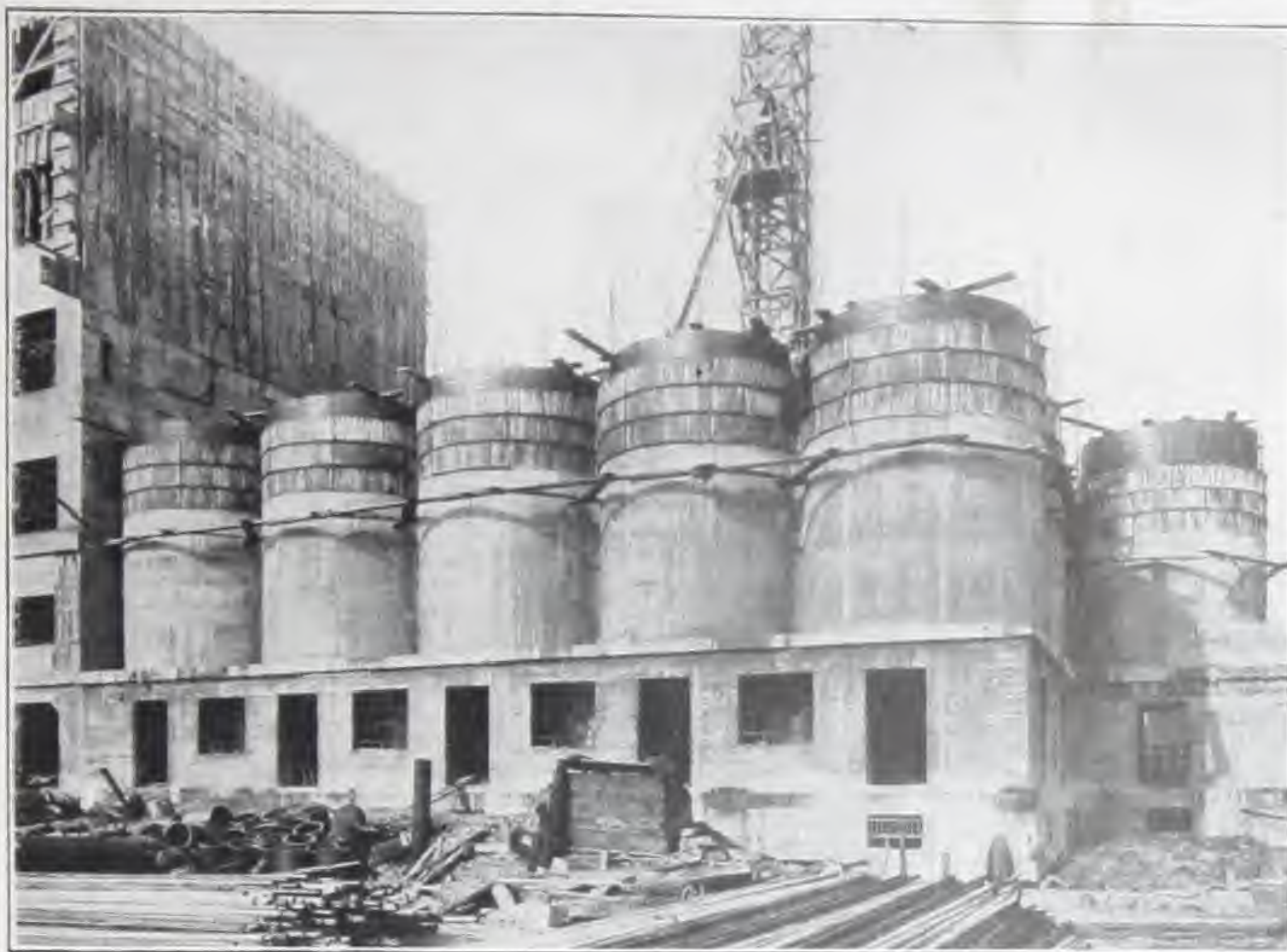


Blaw Special Forms for Casting Face Blocks, Kensico Dam
Valhalla, N. Y. H. S. Kerbaugh, Inc., New York, Contractors

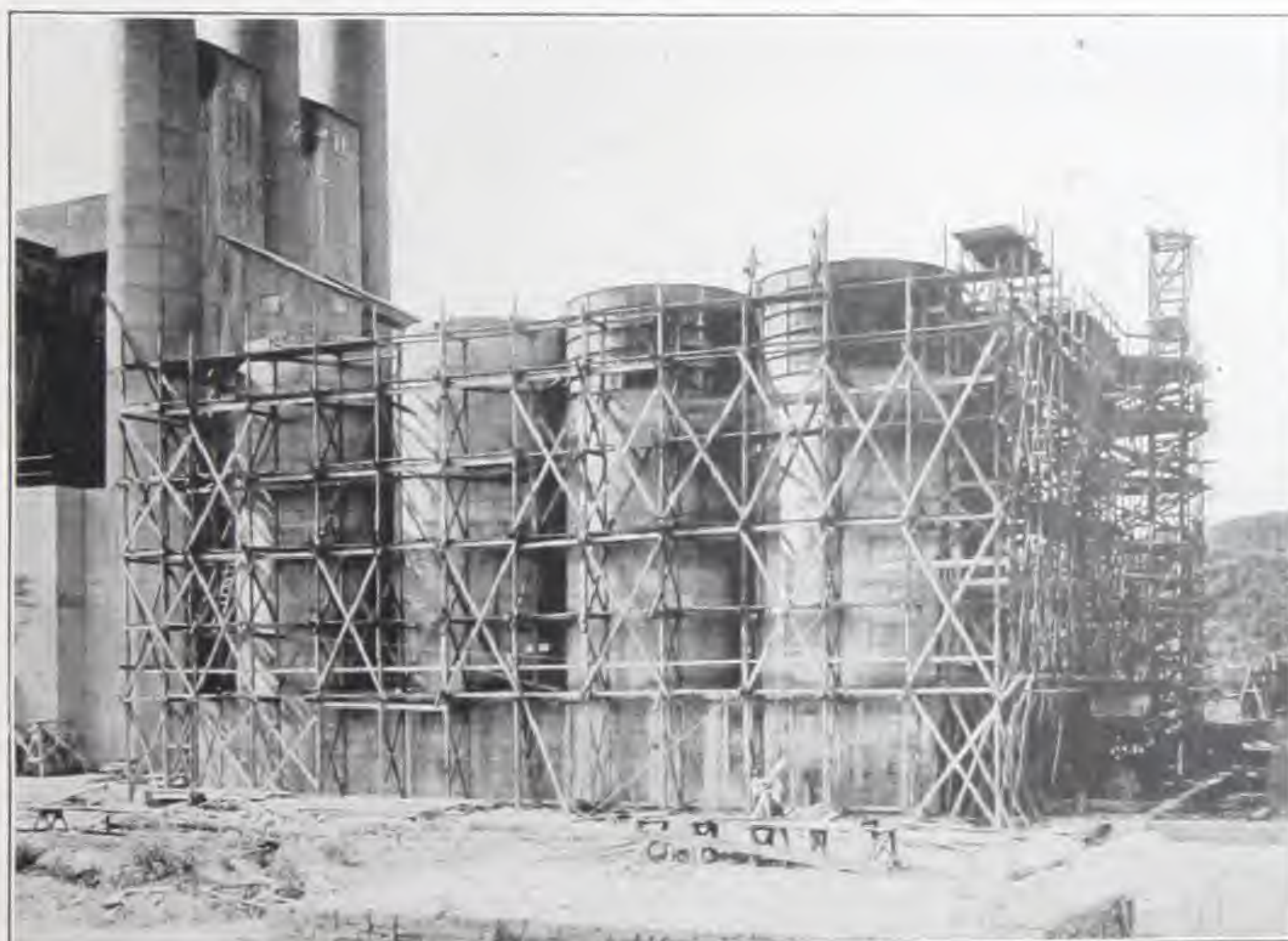


Blaw Special Floor Forms

BLAWFORMS FOR MISCELLANEOUS CONSTRUCTION



Blaw Steel Forms for Grain Tank Construction
Commercial Milling Company, Detroit, Mich.



Blaw Steel Forms on Cement Storage Tanks, German-American
Portland Cement Company, LaSalle, Indiana
The Austin Company, Cleveland, Ohio, Contractors

BLAWFORMS FOR MISCELLANEOUS CONSTRUCTION

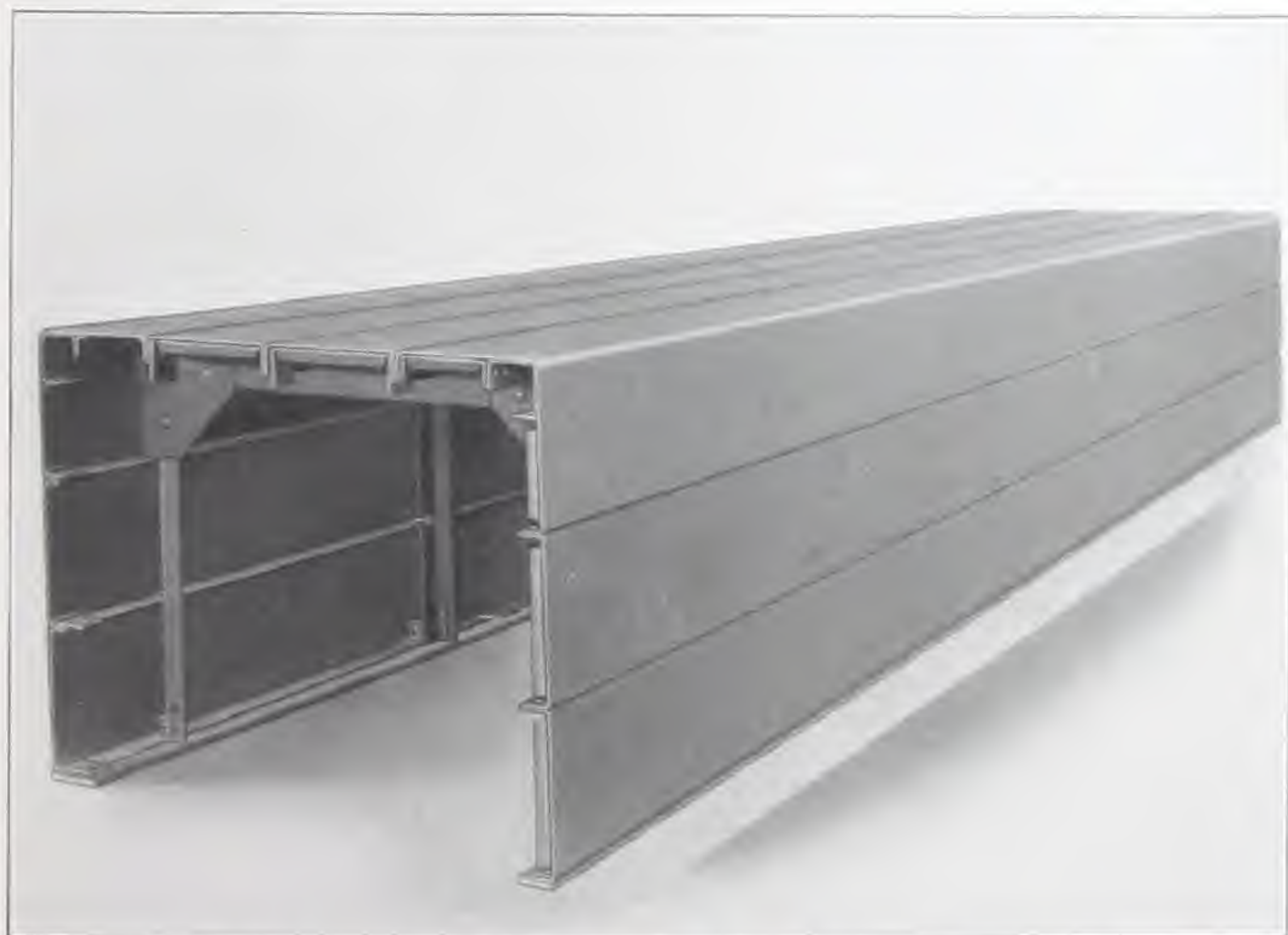


Blaw Special Forms on 42-foot Diameter by 172-foot Water Tower
Capacity 500,000 Gallons; Middleboro, Massachusetts
Hennebique Construction Company, Contractors

BLAWFORMS FOR MISCELLANEOUS CONSTRUCTION



Blaw Special Column Forms on Illinois Central Railroad



Blaw Adjustable Rectangular Culvert Forms. One Outfit Builds Culverts of Different Dimensions

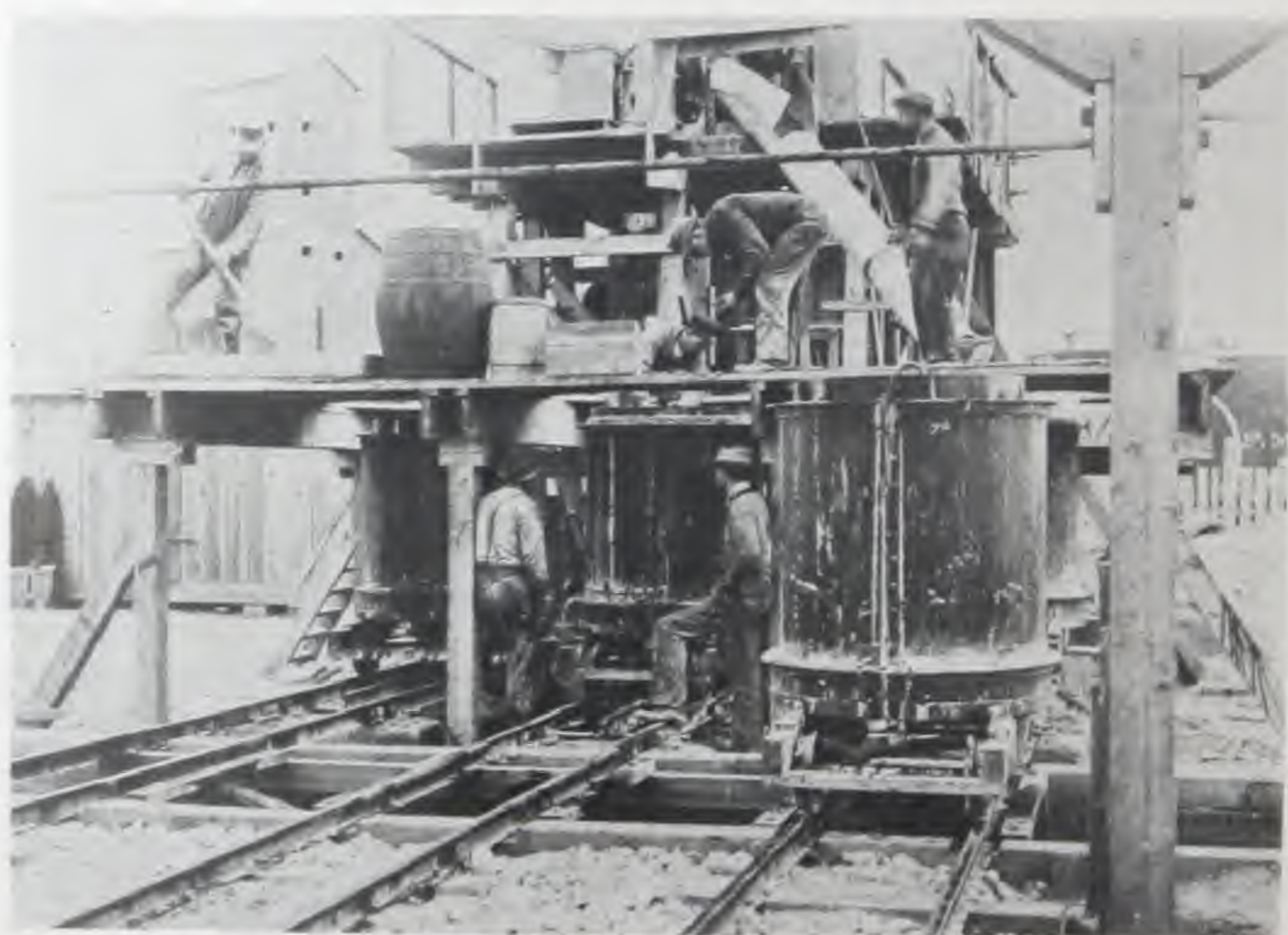
BLAWFORMS FOR MISCELLANEOUS CONSTRUCTION



Blaw Bell-End Pipe Mold



Blaw Pipe Forms at Chicago, Burlington & Quincy Railroad Pipe Plant



Blaw Pipe Forms. Parmley & Nethercutt, Engineers, New York

BLAWFORMS FOR MISCELLANEOUS CONSTRUCTION

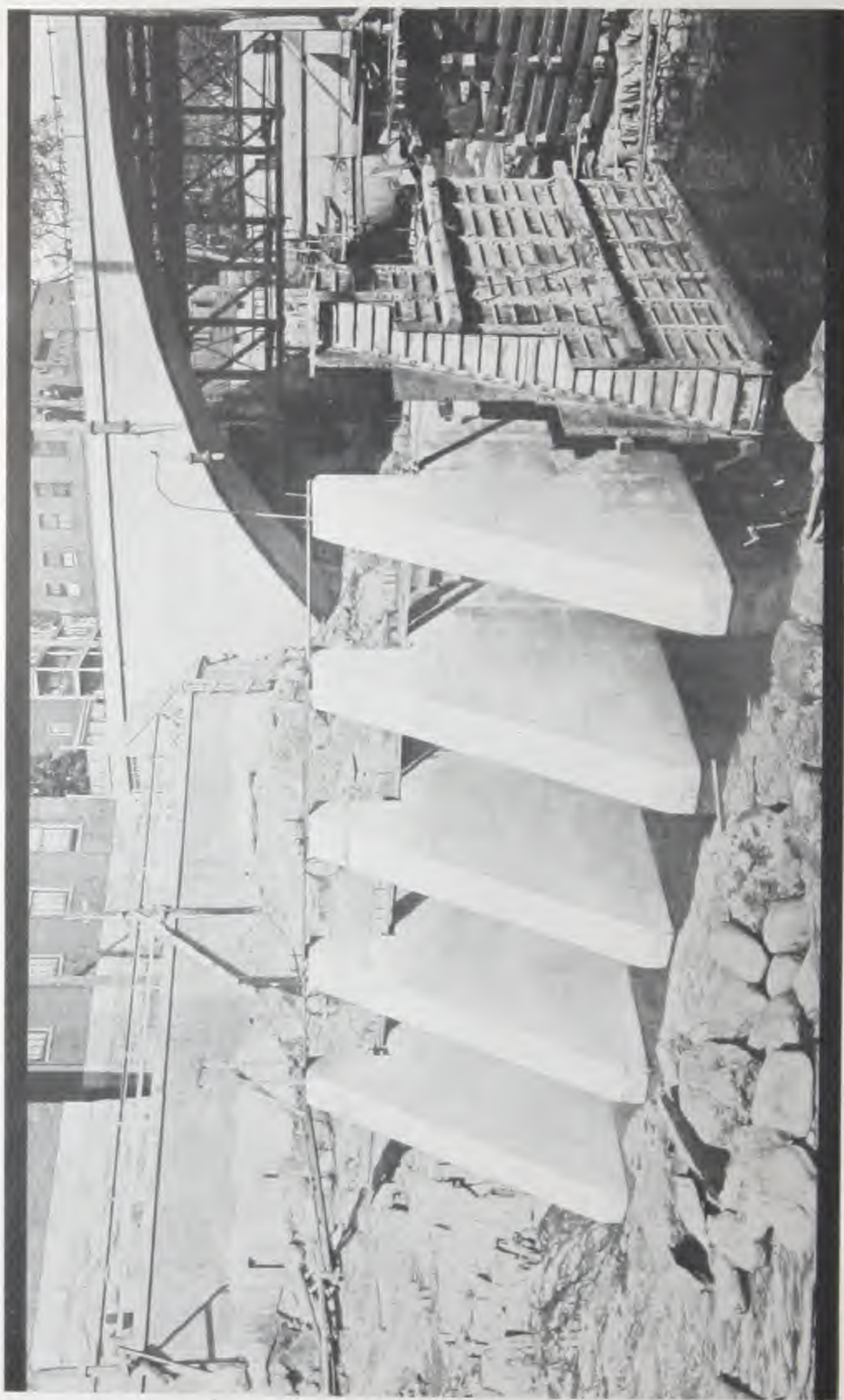


Blaw Standard Manhole and Cistern Forms



Blaw Special Pier Forms on Dock, Duluth, Missabe & Northern Railroad; Duluth, Minn. Bates & Rogers, Contractors

BLAWFORMS FOR MISCELLANEOUS CONSTRUCTION



Blaw Special Forms Used for Building Piers in Headworks for Lockwood Company, Waterville, Maine

BLAWFORMS FOR MISCELLANEOUS CONSTRUCTION



Blaw Steel Forms for Walls and Draft Tubes on Prairie du Sac Plant, Wisconsin Power Company
James O. Heyworth, Contractor

Successful Performance the Real Reason for Blawform Leadership

Recognition of Blawform superiority is not confined to a few localities, or one or two types of concrete construction. It is nation-wide—ranging from small sidewalks to projects like the Welland and Sault Ste. Marie Canals, Winnipeg Aqueduct, Catskill Aqueduct, Panama Canal, New York and Boston Subways, Halifax Ocean Terminals, and the Diana and Astoria Tunnels. Blawforms have proved a paying investment on over 20,000 contracts.

Blawforms are built for Sewers, Aqueducts, Drains, Subways, Tunnels, Shafts, Viaducts, Bridges, Piers, Caissons, Locks, Dams, Retaining Walls, Reservoirs, Houses, Warehouses, Factories, Foundations, Columns, Beams, Girders, Floors, Tanks, Grain Bins, Manholes, Roads, Sidewalks, Curbs, and Curbs and Gutters.

The Blaw Organization Insures Good Service

The Blaw Steel Construction Company can be relied upon to give the best of service to its customers for the following reasons:

The Company is financially sound and reliable and able to fulfill all its promises.

The Company has been in business for over ten years without change of management or organization other than what would result from vigorous growth and a healthy increase in business.

The business of designing and making steel forms is a highly specialized one, in which the accumulation of engineering knowledge in a permanent corps of engineers is of the utmost importance. It is this which makes Blaw Engineering Service of such great value to the contractor and engineer.

The Cost of Blawforms Should be Measured by Results Obtained

When you consider Blaw Steel Forms for that next contract of yours, the all-important question is—"What returns will I secure for every dollar I invest?" The greater the returns, the better buy you make.

A significant feature of Blawform Sales is the high percentage of repeat orders by Contractors and Engineers who know exactly what Blawforms will do for them. Through **actual experience**, they have found that the slightly increased cost of Blawforms over wood forms is more than offset by the savings in time, labor and material effected by their use.

You can find out **for yourself** exactly how profitable Blawforms can be made for you by sending us plans and description of your next job. If there's concrete to be placed, Blawforms will cut the costs. **The proof is entirely up to us.**

While Making Up Your Bids Is Not Any Too Soon to Get in Touch With Us

The most successful contractors in the country, men who have made good, and who know the business from the ground up, always invite our Engineering Department to make a "Form Study" of the concrete work involved before they make their bid.

They know the value of the ten years' experience we have had in designing steel forms of every type and size. They know the service we render—service while they are making up their bids; service while they are planning their work; service while the work is going on.

Let us study your next job and show you how to save. No concrete job is too large or too small or too complicated to submit to us. We have saved on over 20,000 contracts—we can save for you.

Blaw Literature Embraces the Entire Steel Form Industry

If you do not find an illustration of Blawforms in this book that suggests a more efficient and more economical way of handling your concrete work, write us. We will be glad to send you additional printed matter and further information, or make a special study of the work in which you are interested.

Blaw Bulletins and Catalogs

- Catalog 8**—Concrete Sewer Construction.
Catalog 10—Steel Centering for Concrete Construction.
Catalog 12—Steel Forms for General Concrete Construction.
Catalog 14—Blawforms. Steel Forms for Concrete Construction.
Catalog 16—Blawforms—General Catalog.
Bulletin 35—Half Round Steel Centers on Circular Conduits.
Bulletin 36—Full Round Steel Centers for Monolithic Construction.
Bulletin 37—Indianapolis Sewerage System and the Blaw System.
Bulletin 38—Box Centers for Concrete Culvert Construction.
Bulletin 39—Steel Centers on Large Sewerage Construction.
Bulletin 40—Baltimore Sewerage System and the Blaw System.
Bulletin 41—Shaft Lining and Tunnel Centering.
Bulletin 42—The Louisville Sewerage System and the Blaw System.
Bulletin 43—Cut and Cover Construction on Catskill Aqueduct—Reprint from Eng. Record.
Bulletin 44—Steel and Concrete—Reprint from Iron Age.
Bulletin 45—Blaw Special Steel Culvert Mold.
Bulletin 46—Concrete Culvert Construction for Roads and Railroads.
Book 150 Pages—"The Water Supply of New York City." (Price 50 cents.)
Bulletin 47—Steel Forms for Sidewalk, Curb, and Gutter Construction.
Bulletin 48—Steel Forms for Concrete Wall Construction.
Bulletin 49—Subway Construction.
Bulletin 50—Adjustable Steel Forms for Walls, Columns, Girders, Beams and Floors.
Bulletin 51—Collapsible Steel Forms for Concrete Fireproofing of Steel Frame Buildings.
Bulletin 52—Blaw Silo and Tank Forms.
Bulletin 53—Concrete House Construction and the Blaw System.
Bulletin 54—Concrete Conduit Construction.
Bulletin 55—Blaw Arch Ribs for Bridges, etc.
Bulletin 56—Blaw Steel Wall Forms.
Bulletin 57—Instructions for Using Blaw Wall Forms.
Plan Book—Plans for Concrete Houses.
Bulletin 58—Steel Forms for Tunnel and Shaft Construction.
Bulletin 59—Blaw Column Molds and Heads.
Bulletin 60—Blaw Steel Forms for Light Retaining Wall Construction. (Reprint from Concrete-Cement Age.)
Bulletin 61—Instructions for Using Blaw Light Wall Forms.
Bulletin 62—Time and Cost Saving with Movable Forms. (Reprint from Eng. Record.)
Bulletin 63—Blaw Steel Forms for Concrete Floors.
Bulletin 64—Blaw Steel Forms for Manholes and Cisterns.
Bulletin 65—Blawforms for Concrete Sidewalk, Curb and Gutter, Road and Similar Construction.
Bulletin 66—Blaw Light Wall Forms.
Bulletin 67—Blaw Adjustable Column Molds and Heads.
Bulletin 68—The Largest Concrete Water Tank in the World. (Reprint from Eng. Contr.)
Bulletin 69—Blawforms for Concrete Sidewalk, Curb, Curb and Gutter, Road and Similar Construction.
Bulletin 70—Blaw Rectangular Culvert Form.

A Word with Reference to Blaw Patents

Blawforms in all their various types are covered by a large number of patents, issued and pending. For the past ten years our large corps of Engineers and Experts have specialized on this work to the extent that the Blaw Company are now known throughout the civilized world as the Form Experts in all classes of Concrete work.

In the development of these patents we have spent considerable sums, and we are prepared, in self-protection, to prosecute vigorously any and all attempted infringements.



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